



UNITED NATIONS  
*Office on Drugs and Crime*



# ALTERNATIVE DEVELOPMENT: A GLOBAL THEMATIC EVALUATION

Final Synthesis Report

United Nations Office on Drugs and Crime  
Vienna

# Alternative Development: A Global Thematic Evaluation

*Final Synthesis Report*



UNITED NATIONS  
New York, 2005

UNITED NATIONS PUBLICATION  
Sales No. E.05.XI.13  
ISBN 92-1-148205-4

# Preface

The present report has been prepared pursuant to Commission on Narcotic Drugs resolution 45/14, in paragraph 10 of which the Commission urged Member States, in cooperation with the United Nations International Drug Control Programme, to facilitate a rigorous and comprehensive thematic evaluation, within available voluntary resources, for determining best practices in alternative development by assessing the impact of alternative development on both human development indicators and drug control objectives and by addressing the key development issues of poverty reduction, gender, environmental sustainability and conflict resolution.

In accordance with resolution 45/14, a Steering Group of independent experts was established to oversee and manage the evaluation. Each regional group of States could appoint up to three experts to the Steering Group. In nominating experts to the Steering Group, each regional group would name one expert to act as a core member while the other experts nominated by each regional group—if any—would act as consulting members.

The members of the Steering Group were as follows (*core members in italics*):

*Chair: David Mansfield, Drug Policy and Projects Adviser (United Kingdom of Great Britain and Northern Ireland)*

*Members: Muhammad Ashraf Cheema, Deputy Secretary, Narcotics Control Division (Pakistan)*

Jorge Azad Ayala, Vice-Minister of Alternative Development (Bolivia)

Christoph Berg, Head of Project, Development-Oriented Drug Control Programme German Agency for Technical Cooperation (GTZ) (Germany)

*Disnadda Diskul, Secretary-General, Mae Fah Luang Foundation (Thailand)*

*Fernando Hurtado-Pascual, Director, Alternative Development, National Commission for Development and a Drug-free Lifestyle (DEVIDA) (Peru)*

*Michael Kalinin, Deputy Permanent Representative of the Russian Federation to the International Organizations in Vienna (Russian Federation)*

Hamid Mannan, Director of Drug Combat Administration, Ministry of the Interior (Sudan)

*Charles C. Maponga, Director, Drugs and Toxicology Information Services, and Chairman, Department of Pharmacy, University of Zimbabwe (Zimbabwe)*

Victoria Eugenia Restrepo Uribe, Director, Programme on Alternative Development (Colombia)

Zhao Wanpeng, Deputy Director, International Cooperation Division, National Narcotics Control Commission (China)

*Facilitators: E. Deon, United Nations Office on Drugs and Crime*

*A. Korenblik, United Nations Office on Drugs and Crime*

James Jones, Consultant, prepared the present final synthesis report of the global thematic evaluation of alternative development under the guidance of and on behalf of the Steering Group. Ken Kampe, consultant, provided technical support on the South East Asian aspects of the report.

Funding for the Thematic Evaluation was generously provided by the German Federal Ministry for Economic Cooperation and Development (BMZ).

# Summary

In March 2002, in its resolution 45/14, the Commission on Narcotic Drugs urged Member States, in cooperation with the United Nations International Drug Control Programme, to prepare a comprehensive thematic evaluation of alternative development. Synthesized below are the findings of that evaluation, which rest on recent studies of alternative development in South-East Asia (Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam) and in the Andean region of South America (Bolivia, Colombia and Peru). Those studies drew on data from evaluation and other reports, seminars, workshops and interviews with key alternative development actors over more than a decade and on a recent in-depth field assessment of alternative development in each region—in the Aguaytía-Neshuya area of the Huallaga Valley in Peru and in a multi-ethnic highland area of northern Thailand.

A quarter of a century on, alternative development donors and practitioners still underestimate the socio-cultural, economic, political and environmental milieu in which alternative development operates, which invites unrealistic expectations and projects set to fail.

In Latin America, class and ethnicity order society. The richest one tenth of the population earn 50 per cent of income, the poorest tenth earning 1.6 per cent. Andean alternative development clients are the poor. Theirs is a peasant world: relations are face to face, the outlook is local. Illiteracy feeds an oral tradition: a spoken promise is equal to a written contract. Social bonds are tenuous and the social fabric is disturbance-prone and vulnerable to violence. Past history and milieu breed mistrust: things are thought to be other than what they seem. In South-East Asia, alternative development clients are ethnic peasants who migrated from China into the highlands of the Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam in the 1800s. They have only recently begun to create links to the dominant lowland society. The task is first to bring them in rather than move them up, as in the Andean region.

In both the Andean region and South-East Asia, poverty and illicit crops were found to overlap. In Bolivia's Chapare region, 85 per cent of the migrant population endured poverty and 30 per cent extreme poverty. In Peru, 70 per cent of farmers in zones of coca bush cultivation faced poverty and 42 per cent extreme poverty. In Myanmar, families cultivating opium poppy, among the poorest, earned \$214 per year. In Thailand's Nam Lang area, the annual household income was \$236, with 42 per cent of households in debt, when alternative development began. In Viet Nam, 50 to 78 per cent of hill-tribe families were found to be poor. And in the Lao People's Democratic Republic, two thirds of the 47 poorest districts grew poppy to augment family income.

Alternative development varies by milieu. Andean peasants cited a lack of markets for alternative crops; Asian peasants a lack of access to state services—in Thailand, to land and citizenship. Donor and national government policies often conditioned aid and were the cause of variations in alternative development. Policies could range from an emphasis on security, with law enforcement and prompt eradication, to an emphasis on poverty alleviation and development. Alternative development had clearly helped much to reduce and contain the spread of illicit drug crops, but, as one of several forces at play, its precise contribution was rarely known. It was known that farmers of illicit crops receiving alternative development had been few: 23 per cent in the Andes, 5 per cent in Asia. These few represented numerous successes, however, which suggested an unrealized potential.

In Peru, alternative development coffee supported 5,000 families and oil palm 1,815 Huallaga families. In Colombia, 1,500 Cauca families sold organic coffee to Europe and coffee and palm cabbage to the French supermarket chain Carrefour. In Thailand, household income in the Doi Tung project rose sevenfold, while the percentage of those lacking citizenship fell by half. The Thai-German Highland Development Programme brought schooling, health services and clean water, with fewer water-borne infections. In the Lao People's Democratic Republic, Myanmar and Viet Nam, a plethora of languages, structures that excluded local participation, armed conflict, forced eradication and mistrust had slowed alternative development. Nonetheless, alternative development among Myanmar's Wa people had reduced infant mortality by means of vaccinations and had also eliminated leprosy. And the Palavek project in the Lao People's Democratic Republic was key in eliminating opium production by introducing village-level treatment of addicts.

The study showed that alternative development had stabilized shifting agriculture, checking erosion and enabling sustainable farming. It had promoted forestry and agro-forestry, with marketable tree crops. Still, commercial farming was a threat. Alternative development had addressed gender with mixed results, dealing poorly with household gender roles and how they react to external pressure. Its relation to conflict resolution had been little studied. Conflict occurred all along a chain from the farmer of illicit drug crops upwards. Alternative development work at the base—offering alternatives and fortifying civil society—shifted upwards. The households that took part in the study in Peru cited better security as the main and most sustainable impact of alternative development. Impacts could also be negative, however, forcing unprepared hill farmers into mainstream society or promoting technology that caused land and water squabbles.

Alternative development supported the sustainable reduction of drug crops by improving livelihoods. Thus policy must treat drug control as a development issue. Other major conclusions of the evaluation were as follows:

- The formulation of alternative development policy worked best when all stakeholders—donors, Governments, non-governmental organizations and beneficiaries—participated and came to a consensus.
- The formulation of policy required flexibility to adapt to particular regions and situations. It must accommodate local knowledge, skills and culture.
- Community participation throughout the project cycle—feasibility assessment, planning, project design, implementation, monitoring and evaluation—was vital.
- Decentralized, participatory decision-making and the empowerment of local communities, which in turn contributed to creating a sense of ownership of alternative development activities among its clients, increased the quality of development assistance as well as the chances of sustainability.
- Impact must be monitored at the household level. This required use of quantitative and qualitative indicators to measure human development as well as drug control. Baseline surveys were mandatory requirements without which alternative development activities could not be properly monitored or evaluated. Only by understanding the processes by which households moved from illicit to licit livelihoods could policy development become evidence-based and accountable.
- Political commitment could not be ad hoc. It implied long-term commitment of financial resources to human development, reasonable drug control laws, respect for human rights and

a coordinated inclusion of illicit crop reduction (law enforcement and alternative development) in national and regional planning.

- Alternative development projects led by security and other non-development concerns were typically not sustainable—and might result in the spread or return of illicit crops or in the materialization of other adverse conditions, including less security.
- As growers of illicit crops agreed to participate in alternative development projects, they needed to be allowed a transition period until alternative development activities (on- or off-farm) proved to be suitable to their agro-ecological environment and local knowledge and started generating income that would contribute to improving the quality of their lives.
- Alternative development requires an appropriate policy/legal framework, one that allows growers of illicit crops to be treated first as candidates for development rather than as criminals.
- Alternative development is more effective and more sustainable as part of a wider development scheme whose goal is to improve the livelihoods of marginal rural populations.
- The eradication of illicit drug crops on peasant farms lacking viable alternatives undermines development.
- Law enforcement is vital to successful alternative development but, to be effective, it must use strategies to reduce demand at the farm gate rather than directly target peasant farmers. Such strategies include strengthened capacity of law enforcement to interdict illicit drugs and chemical precursors used for the illicit manufacture of drugs. They also diminish traffickers' ability to operate, thus reducing the demand for illicit crops and lowering farm-gate prices.

## Some basic recommendations

- A firm political commitment needs to be made to pursue alternative development in coordination with all stakeholders so that it is sustainable and has human development as the ultimate aim.
- A global partnership should be established between development entities and national groups to make reducing the cultivation of illicit crops a cross-cutting issue, thus maximizing the impact of efforts.
- The elimination of illicit crops should be conditional on improvements in the lives and livelihoods of households. It should not be a prerequisite for development assistance.



# Contents

I.	Introduction .....	1
	Cultivation of illicit crops: challenge and threat .....	1
	Implementation of alternative development .....	2
	Evaluation focus .....	3
II.	Impact: changes in lives and livelihoods .....	4
	Declines in illicit crops cultivation .....	4
	Poverty reduction and improved quality of life .....	5
	Environmental sustainability .....	7
	Gender roles .....	8
	Conflict resolution .....	9
	Sustainability of impact .....	10
III.	Conclusions and lessons learned .....	11
	Formulation of policy and monitoring of impact .....	11
	Political commitment .....	12
	Development as drug control .....	12
	Eradication and conditionality .....	14
	Law enforcement as interdiction .....	15
	<i>Recommendations</i> .....	16

## Annexes

I.	Cultivation of illicit crops .....	19
II.	Export performance of the Central de Cooperativas de la Convención y Lares, 1987-2003 .....	20
III.	Doi Tung development project: socio-economic indicators .....	21
IV.	Doi Tung development project: environmental indicators .....	23
V.	Peru field assessment: gender structure .....	26
VI.	Doi Tung development project: gender structure .....	28
VII.	Peru field assessment: impact and sustainability of alternative development .....	29
VIII.	Peru field assessment: factors contributing to positive results in alternative development .....	32



# I. Introduction

## Cultivation of illicit crops: challenge and threat

A quarter of a century on, alternative development donors and practitioners still underestimate the socio-cultural, economic, political and environmental setting in which alternative development operates, which invites unrealistic expectations and projects that are primed to fail.

In the Andean region, as in the rest of Latin America, class and ethnicity organize society. Rigid class lines allow the richest one tenth to earn 50 per cent of total income and the poorest tenth but 1.6 per cent. As the co-author of a recent World Bank report<sup>1</sup> notes:

"Latin America and the Caribbean is one of the regions of the world with the greatest inequality . . . Latin America is highly unequal with respect to incomes, and also exhibits unequal access to education, health, water and electricity, as well as huge disparities in voice, assets and opportunities. This inequality slows the pace of poverty reduction, and undermines the development process itself."

The *World Development Report 2004*<sup>2</sup> ranks Colombia as the world's ninth most unequal country.<sup>3</sup> Its Controller-General reports that two thirds of all Colombians, and over 85 per cent of rural Colombians, live below a \$3-per-day poverty line.<sup>4</sup> These poor are the clients of alternative development. Mainly highlanders came to the tropical lowlands after 1950, driven by scarcity of land, drought, violence and illusory colonization schemes, often state-sponsored as substitutes for politically volatile land reform. Theirs is a peasant world where relations are

face-to-face. Their outlook is local, most know little of the wider world. Illiteracy feeds an oral tradition: a spoken promise is equal to a written contract. Historical forces have twisted their world. Social bonds in migrant communities tend to be tenuous, as do those of organizations—if those exist—indeed, "community" may be only a geographical reference. The social texture is vulnerable to internal and external disturbance. Added to this has come occasional violence, often drug-related, as rival bands and irregular armed groups have fought for territory and enforced grower "contracts". This dynamic, steeped in violence, has spawned an individual psychology of fear and mistrust, aimed not only at the "outsider", including a State whose presence in many rural areas can be rather marginal, but also at others in the community. Things are thought to be other than what they seem, no one is trusted; devils, real and imagined, endlessly stalk the psyche.

Alternative development clients in South-East Asia are also peasants, but they grow opium poppy rather than coca bush.<sup>5</sup> Most belong to ethnic groups that migrated from China into the highlands of the Lao People's Democratic Republic, Myanmar, Thailand and Viet Nam in the nineteenth century. The highlands long remained isolated, and only recently began to connect with the functioning national societies. Even in 1990, fewer than half of the 600,000 Thai hill people were citizens.<sup>6</sup> Though their culture is a rural one, the migrants are not, as in the Andean region, victims of centuries-long repression—with the associated cumulative grievances—who cling to the bottom of a feudal regime. The first challenge is thus to bring them in rather than move them up. Programmes to that end, however, often driven by security concerns, have

<sup>1</sup>David de Ferranti and others, *Inequality in Latin America and the Caribbean: Breaking with History* (Washington, D.C., World Bank, 2003).

<sup>2</sup>World Bank, *World Development Report 2004: Making Services Work for Poor People* (Washington, D.C., World Bank; and New York, Oxford University Press, 2003).

<sup>3</sup>And the trend may be growing: the percentage of national income going to the poorest 20 per cent of the population fell from 3.0 per cent in 1996 to 2.7 per cent in 1999. Colombia's Gini coefficient is 57.6.

<sup>4</sup>The 2004 report also notes that the wealthiest 10 per cent of the population earned 80.27 times more than the poorest 10 per cent in 2003.

<sup>5</sup>Opium poppy, unlike coca bush, typically grows in places above 2,000 metres in altitude, but is not restricted to Asia. For more than a decade, Colombia has been growing it and producing heroin. An estimated 80 per cent of the heroin sold in cities in the eastern United States is from Colombia. More recently, small areas of opium poppy cultivation have appeared in Peru.

<sup>6</sup>The Thai Nationality Act of 1911 gave citizenship to all persons born in Thailand, but those who actually became citizens (with identity cards) lived in or near cities. The remote hill people lay well beyond the reach of Thai institutions (see Ronald D. Renard, *Opium Reduction in Thailand 1970-2000* (Bangkok, Silkworm Books, 2001), pp. 53 and 55).

led to discrimination and pressure on the hill peoples to adopt lowland ways.<sup>7</sup> The stress of integration has sometimes caused social breakdown, especially in Thailand, where modernization was rapid in the 1980s.

*“Contrary to popular belief, communities with opium are among the poorest in Lao PDR. The annual national opium poppy survey of 2003 estimates that the average opium farmer gets US\$ 88 from opium poppy cultivation out of an annual income of about US\$ 205. This is roughly equivalent to income that could be generated from the sale of a calf, one ton of rice, a couple of pigs, five goats, fifty chickens or two pieces of woven silk. This is easily achievable.”* Leik Boonwaat, “Achievements and lessons learned from the balanced approach to opium elimination in the Lao PDR (2001–2004)”, paper presented at a meeting on removing impediments to growth held in Doi Tung, Thailand, from 13 to 19 November 2004.

In both the Andean region and South-East Asia, poverty and illicit crops overlap. In Bolivia's coca-growing Chapare region, 85 per cent of the migrant population lives in poverty, 30 per cent in extreme poverty.<sup>8</sup> In their upland zones of origin, poverty levels exceed 90 per cent.<sup>9</sup> In Peru, 70 per cent of those in seven major coca-growing areas live in poverty, 42 per cent in extreme poverty.<sup>10</sup> In Myanmar, families growing opium poppy, among the country's poorest, earn \$214 per year.<sup>11</sup> Of the 38 villages in Thailand's Nam Lang area when an alternative development programme began in 1983, nine had road access, none had electricity and only six had potable water, while

only 8 per cent of children went to school. Annual household income averaged \$236, with 42 per cent of households in debt.<sup>12</sup> In Viet Nam, rural dwellers make up 90 per cent of the poor, with poverty the worst in the highlands. There, 50–78 per cent of households among the hill peoples are poor: a four-district survey found mean annual income at \$131.<sup>13</sup> In the Lao People's Democratic Republic, two thirds of the 47 poorest districts grow opium poppy to augment family income. Households growing poppy earn an annual income of \$205, \$88 of it from opium.<sup>14</sup>

Poverty and illicit crops threaten political and economic stability, national security and the environment: drugs fan armed conflicts in Colombia and Myanmar; criminal mafias everywhere disturb the peace; and shifting opium poppy farmers cause erosion and alter climates.

## Implementation of alternative development

The way alternative development works varies by region and country, in response to the particular situation as regards illicit crops, donor drug control strategies, national strategies and institutions—even notions of alternative development.<sup>15</sup>

In the Andean region, growers of illicit crops first highlight an income obstacle—as expected in a class-based

<sup>7</sup>Insurgent groups plagued Thailand in the 1960s and 1970s, a time when the United States saw Thailand as the prize “domino” in the so-called domino theory that guided United States policy and military intervention in Indochina until 1975.

<sup>8</sup>From the 2001 census in the Cochabamba tropics (see *El Trópico en Cifras* (Cochabamba, Mancomunidad del Trópico, 2004)).

<sup>9</sup>República de Bolivia, *Plan Nacional de Desarrollo Alternativo 2003–2008* (Ministerio de Asuntos Campesinos Indígenas y Agropecuarios, November 2002), p. 2.

<sup>10</sup>These regions include seven departments: Ayacucho, Cusco, Huanuco, Junín, Pasco, San Martín and Ucayali (United States Agency for International Development, *Annual Report Fy 2003* (Washington, D.C., 13 March 2003), pp. 6 and 7).

<sup>11</sup>Source: UNODC.

<sup>12</sup>Thai-German Highland Development Programme, *Review of TG-HDP's Agricultural and Forestry Programmes, 1984–1998, with Special Reference to Community-based Natural Resource Management*, Internal Paper No. 212 (Chiang Mai, Thailand, 1998), vol. 1, p. 12; and *Impact Assessment Study, Nam Lang*, Internal Paper 179 (Chiang Mai, Thailand, 1994), pp. 6 and 29.

<sup>13</sup>UNODC, *Research Study of the Vietnamese Experience on Opium Eradication* (Hanoi, undated), pp. 8, 9, 12 and 51.

<sup>14</sup>Leik Boonwaat, “Achievements and lessons learned from the balanced approach to opium elimination in the Lao PDR (2001–2004)”, paper presented at a meeting on removing impediments to growth held in Doi Tung, Thailand, from 13 to 19 November 2004. Ethnic minorities comprise up to 70 per cent of the population of the Lao People's Democratic Republic (see Leik Boonwaat, “Gender mainstreaming in the balanced approach to opium elimination programme in the Lao PDR”, *Emerging Gender Strategies for Alternative Development: Regional Seminar on Alternative Development; Information Networking and Sharing Good Practice on Gender Development*, Publication No. 4/2004 (Bangkok, United Nations Office on Drugs and Crime Regional Centre for East Asia and the Pacific, 2004), pp. 18–25).

<sup>15</sup>At its twentieth special session, in its resolution S-20/4 E, the General Assembly defined alternative development as a process to prevent and eliminate the illicit cultivation of plants containing narcotic drugs and psychotropic substances through specifically designed rural development measures in the context of sustained national economic growth and sustainable development efforts in countries taking action against drugs, recognizing the particular sociocultural characteristics of the target communities and groups, within the framework of a comprehensive and permanent solution to the problem of illicit drugs.

society. Poor roads, lack of credit, absence of agro-industry and other factors bear on this, but growers rank one factor above all others: a lack of viable, stable markets for alternatives. South-East Asian growers, by contrast, while facing many of the same obstacles, focus first on gaining entry into national society—the ethnic issue is at the fore—and access to its services. In Thailand, for instance, citizenship and land access rank high.<sup>16</sup>

*“Those of us who defend our coca . . . have grown it for 3,000 years. It’s never harmed us, nobody gets hooked on drugs. We totally reject drug trafficking. But drug trafficking exists because of the demand for drugs. We agree to help fight drug trafficking, but help us to find markets for alternative products.”* Farmer leader, Yungas, Bolivia

The drug control milieu in the two regions differs in yet other ways: illicit crops in the Andean region, more than in South-East Asia (at least at present), tend to be treated first as a security threat to be addressed by strict law enforcement and direct eradication, with readily visible results, rather than as a poverty issue to be addressed through development. Even in the Andean region, however, donors and Governments vary with regard to the emphasis they place on these two strategies and the conditions they attach to alternative development assistance. This lack of consensus, which is reflected also in United Nations instruments, can cause local tensions when the

strategies operate side by side in a single or contiguous geographical areas.<sup>17</sup>

The national management of alternative development also varies by region. In the Andean region, each country has a single entity that coordinates, or implements, donor and national alternative development projects—the Regional Alternative Development Programme (PDAR) in Bolivia, the National Alternative Development Plan (PLANTE) (until recently) in Colombia and the National Commission for Development and a Drug-free Lifestyle (DEVIDA) in Peru. While this has advantages, it has also led to the slighting of public line agencies—for agriculture, transportation, health and education—vital to sustainable development.<sup>18</sup> Alternative development management in South-East Asia is more diverse, and more complex. Yet those countries tend more to involve line development agencies, though often working with, or under, an agency charged with addressing ethnic, highland or border issues, as in Myanmar, Thailand and Viet Nam.<sup>19</sup>

## Evaluation focus

The following sections of the present report discuss the operation of alternative development in the two regions under review, the Andean region of South America and South-East Asia, addressing the impact of alternative development and identifying factors explaining success or failure, then describing some lessons learned over the years and making recommendations.

<sup>16</sup>The land problem in South-East Asia is unlike that in the Andean region, where the volatile issue is land reform. In Asia, growers practise shifting cultivation in highland forests that may, as in Thailand, carry a protected status vis-à-vis national Governments, with settlements there illegal. The hill peoples confront not only environmental interests opposed to shifting agriculture, but also aggressive illegal timber interests, as in the Lao People’s Democratic Republic and Thailand, where those interests operate through corruption and political influence.

<sup>17</sup>Many donors have funded alternative development in the Andean region over the years. The major ones, in order, have been the United States (USAID), UNODC and Germany (GTZ), with the European Union now beginning to play a larger role. In size of investment, the United States surpasses all others. In Peru, the United States funded about 95 per cent of alternative development in 2003.

<sup>18</sup>This is not to deny the important role played by private-sector entities—such as the Cooperativas Agrarias Cafetaleras (COCLA) and Oleaginosas Amazónicas S.A. (OLAMSA) in Peru, the Empresa Cooperativa del Sur del Carca (COSURCA) in Colombia, all farmer-controlled—so much as to stress a greater need for appropriate public sector involvement. Such involvement also evidences a Government’s commitment to aiding its marginal sectors.

<sup>19</sup>In Viet Nam, the Ministry of Agriculture and Rural Development cooperates with the Committee for Ethnic Minorities and Mountain Affairs. In Myanmar, development agencies work in the eastern Shan State under the Ministry for Border Areas and National Races and Development Affairs. In Thailand, the Government has singled out the highlands and their ethnic groups for development since 1969, when the royal project began. (The Thai-German Highland Development Programme (1981–1998), however, did designate Thailand’s Office of the Narcotics Control Board as executor, though development entities, national and local (when they existed), still played an important role (see Bundesministerium für Wirtschaftliche Zusammenarbeit, *Evaluation of the Project Thai-German Highland Development Programme (TG-HDP)*, P.N. 90.2083.5 (Bonn, March 1993), p. 4)). In both the Lao People’s Democratic Republic and Myanmar, donor-funded projects and external personnel play an enlarged in-country role, owing to weaker institutions and fewer trained nationals. Alternative development projects there, as early on in Thailand, seek to strengthen the national human-resource base as well as to address the needs of growers of illicit crops.

## II. Impact: changes in lives and livelihoods

### Declines in illicit crop cultivation

Both the Andean region and South-East Asia have seen a decline in the cultivation of illicit crops over the past 15 years. The decline is smaller in the Andean region, where cultivation of coca bush fell from 210,000 hectares (ha) in 1990 to 150,000 ha at the end of 2003—a 28 per cent reduction. South-East Asian opium poppy cultivation fell from 200,000 ha in 1990 to 50,000 ha in mid-2004—a 75 per cent reduction (see annex I). Alternative development has clearly contributed to those declines, more so in some countries than in others, but because it is only one of several factors operating together to reduce the cultivation of illicit crops, the precise impact of its contribution is not always known.

Coca bush cultivation in Peru's Aguaytia basin, site of the Andean regional study, declined from 16,000 ha in 1995 to about 500 ha at present. Forty per cent of farmers in the 191-household survey reported coca bush as their economic mainstay prior to participating in alternative development, whereas only 5 per cent reported it so at the time of the study. Most of those who had abandoned coca bush cultivation pointed to a voluntary eradication programme funded by the United States of America, whose anti-drug strategy in Peru shifted in 2002, after relying since 1995 on interdiction (of an airbridge) to keep farm-gate coca prices low so that development might work. The new strategy held that neither Peru nor the United States would ever have enough resources to develop the far-flung coca valleys.<sup>20</sup> In some areas in the Andean countries, where law enforcement has been

directed at growers of illicit crops without provision of alternative development assistance, there has been displacement of illicit crops to remote areas, including to fragile ecosystems and the lands of indigenous peoples.

Opium production in Thailand, which is now virtually opium-free, fell from about 145 tons in the 1960s to fewer than 10 tons by 2000. Ninety-five per cent of families growing opium poppy in a 120-family survey (part of the South-East Asian regional study) in Thailand increased the amount of land worked following alternative development assistance, as compared with only 13.3 per cent of others. Thailand, unlike other countries in either region affected by cultivation of illicit crops and thus a special case, incorporated alternative development into large-scale development in the highlands beginning in the 1960s.<sup>21</sup> The 1980s, when the area under opium poppy cultivation fell from 6,000 ha in 1980 to less than 1,000 ha in 1990, saw the greatest decline in opium production. Eradication by the Royal Thai Army and Border Patrol Police helped, but more than a dozen major donor-assisted development projects also began during the period.<sup>22</sup>

*About 5 per cent of poppy-growing families in the Lao People's Democratic Republic have received alternative development support. At issue is how the recent sharp decline in opium poppy cultivation, achieved through opium-elimination contracts with local communities, can be sustained.*

<sup>20</sup>A United States contractor, Chemonics International, worked in 2003 with 27,000 Aguaytia families, who reportedly eliminated 3,000 hectares of coca bush under voluntary eradication pacts. A company official told the study team that Chemonics operated under a coca-reduction mandate from USAID, not a poverty-reduction one.

<sup>21</sup>This "folding" makes it hard, especially for beneficiaries, to distinguish alternative development generally. (United States policy in the 1980s required projects funded by it working in the hills to have opium control as a major objective, even though it was not stated in project documents (see Renard, *op. cit.*, p. 104).) As several reports suggest, this development, especially in the early years, typically sought to remake highlanders into lowland Thais rather than to bring them into Thai society with due regard for their cultures or for their control over the change process (see, for example, Thai-German Highland Development Programme, *Impact Assessment Study . . .*, pp. 9 and 91-94). High stress levels and social anomie, with and without out-migration, often attended this process. It is of interest, as the reports also note, that falling opium production paralleled a rise in use of heroin and amphetamine-type stimulants (ATS), even alcohol—perhaps to cope with the stress and to replace traditional medicinal and ritual opium use.

<sup>22</sup>"Thai-German Highland Development Programme (TG-HDP) in Northern Thailand", *Alternative Development: Sharing Good Practices, Facing Common Problems; Alternative Development in East Asia Regional Seminar on Alternative Development for Illicit Crop Eradication: Policies, Strategies and Actions, 16-19 July 2001. Taunggyi, Myanmar* (Regional Centre for East Asia and the Pacific/United Nations International Drug Control Programme, Bangkok, 2001), p. 91.

Statistics on areas under cultivation of illicit crops can be misleading. The graphs in annex I, for instance, show a 30 per cent fall in coca bush cultivation in the Andean region between 2000 and late 2003. The sustainability of that fall, however, is uncertain. Data from the United Nations Office on Drugs and Crime (UNODC) illicit crop monitoring programme reveal that the number of Colombian provinces with coca bush cultivation rose from 12 in 1999 to 23 in 2003,<sup>23</sup> and the trend continues. Coca bush cultivation has also increased in Bolivia and Peru over the past two years—notably in the Yungas of La Paz and the Apurímac and Huallaga (Monzón) valleys of Peru.<sup>24</sup> As regards Asia, Chouvy observes:<sup>25</sup>

"The forced reduction of opium production during 2003–2004 in Myanmar (down 54 per cent) and in Laos (down 64 per cent) could well have perverse effects such as shifting production to other areas.<sup>26</sup> This was the case in 2002–2003 when a 50 per cent drop in production in the Kokang area of Myanmar's northern Shan state caused opium farming and production to shift to the northern end of the Myanmar's Wa Special Region Number 2. But eradication and interdiction also have another major perverse effect: they drive prices up."

Farmers receiving alternative development support in either region have been relatively few. According to UNODC, alternative development has worked with 23 per cent of families in illicit-crop areas in the Andean region where illicit crops are grown and with only 5 per cent of families in opium poppy-growing areas of the Golden Triangle.<sup>27</sup>

## Poverty reduction and improved quality of life

Alternative development has enjoyed numerous development successes, if at times they have seemed small in relation to the enormity of the challenge. Successes have allowed and consolidated the reduction of illicit crops and contained their spread and suggest what greater commitment could achieve.

In Peru, coffee has been the main alternative, supporting 5,000 families on 12,000 ha. In 1988, UNODC began restoring the Central de Cooperativas de la Convención y Lares (COCLA), a cooperative founded in Cuzco Province in the 1960s (see annex II). Using improved organization, financing, marketing and production technology, COCLA exports rose from 3,000 tons in 1997 to 8,000 in 2003. Since 1997, it has exported directly rather than through middlemen and since 2001 has operated without project assistance.

The UNODC oil palm projects in the Huallaga Valley of Peru have provided income to 1,815 families. Farmers in and beyond the Aguaytía Basin described the work with oil palm as a success: it had enabled them to save, plan for the future and send their children to school. A producer's association and a processing plant had increased employment.<sup>28</sup> A multiplier effect had created new businesses and a livelier economy. The association and the plant had gained region-wide acclaim, giving local people more voice in regional affairs. Half of the Neshuya palm farmers in the study's household survey said that oil palm had improved their living standard "significantly",

<sup>23</sup>UNODC, *Colombia: Coca Cultivation Survey, 2004*, pp. 7 and 11. See also Colette A. Youngers and Eileen Rosin, eds., *Drugs and Democracy in Latin America: the Impact of U.S. Policy* (Boulder, Colorado, and London, Lynne Rienner Publishers, 2004), p. 114, and John M. Walsh, "Are we there yet? Measuring progress in the U.S. war on drugs in Latin America", *Drug War Monitor*, December 2004.

<sup>24</sup>The average annual farm-gate price of Bolivian coca rose from \$1.6/kg in 1997, at the inception of the Government's aggressive forced-eradication campaign in the Chapare region, to \$5.4/kg in 2003. The average annual farm-gate price of Peruvian coca fell from \$2.5/kg in 1994, on the eve of the United States-supported airbridge interdiction, to \$0.8/kg in 1997, but then rose again to \$2.1/kg in 2003 (see *World Drug Report 2004* (United Nations publication, Sales No. E.04.XI.16), vol. 2, Statistics, pp. 243 and 249).

<sup>25</sup>Pierre-Arnaud Chouvy, "The dangers of opium eradication in Asia", *Jane's Intelligence Review*, vol. 17, No. 1 (2005), pp. 26 and 27.

<sup>26</sup>Forced eradication has also been rapid in the Ky Son area of Viet Nam (the Hmong people alone cultivate 75 per cent of opium poppy in Viet Nam) and this has made it difficult for the UNODC-led Ky Son alternative development project to respond in an effective manner. As one UNODC project expert notes (Pere Vogel, "Ky Son alternative development project in Viet Nam", *Alternative Development: Sharing Good Practices*. . . , p. 126): "Too rapid eradication could be counterproductive and result in more re-cultivation, loss of trust in alternative development where an alternative development project can not deal with the rapid increase in demand of its services caused by rapid and efficient enforcement of eradication policies".

<sup>27</sup>Source: UNODC.

<sup>28</sup>The Comité Central de Palmicultores de Ucayali (COCEPU) was founded in 1992 and the processing firm OLAMSA in 1998. COCEPU is majority shareholder (56 per cent) in OLAMSA, with association farmers holding the remaining shares (44 per cent). OLAMSA is an unusual hybrid of cooperative and firm, an arrangement unique to UNODC and now drawing much attention.

while the other half called the improvement "moderate". Farmers often noted the lack of any requirement to eradicate coca before receiving assistance; indeed, coca income had allowed some to make the transition to oil palm.<sup>29</sup> The survey also revealed more education for children over age 17 in Neshuya's palm-producing households than in others. Of much interest is that surveyed households everywhere cited greater peace and security as the major positive impact of alternative development, followed by an increase in the area under cultivation.<sup>30</sup>

In Colombia's southern Cauca Province, where coca bush and opium poppy are grown, UNODC founded the Empresa Cooperativa del Sur del Cauca (COSURCA) in 1993 to organize 19 small-farmer producer groups. Developed along the same lines as COCLA (see above), COSURCA now enables 1,500 families, many of them Amerindian, to sell organic coffee (at twice the farm-gate price of regular coffee) to Europe and coffee and palm cabbage (*palmito*) to the French supermarket chain Carrefour.<sup>31</sup>

South-East Asia has also had alternative development successes. Since the 1970s, the Government of Thailand has expanded services in agriculture, health and education in the context of highland development. Farmers in the household study cited an increase in the area planted to cash crops as well as a reliance on modern production technology as major alternative development impacts. A downside has been increased debt and migration to urban areas in search of employment (see footnote 21).

Thailand's highland areas have enjoyed several major alternative development (or development) initiatives since 1969, among them the Doi Tung development project, begun in 1988 in Chiang Rai Province, near the border with Myanmar, on the initiative of Princess Srinagarindra.<sup>32</sup> As the figures in annex III reveal, the average household income of project participants rose sevenfold between 1988 and 2003 and the percentage of those without Thai citizenship dropped from 62 in 1992 to 30 in 2003.<sup>33</sup> The rising proportion of household income from labour (see figures II and III) refers to wages earned in local factories developed by the project, processing plants (especially for cacao and macadamia), training centres and tourism.<sup>34</sup> Figure IV also shows that the proportion of the population with no education dropped slightly between 1992 and 2003, but that those with secondary education rose sharply.

Another major initiative, the Thai-German Highland Development Programme (1981–1998), operated in the Wawi, Nam Lang and Huai Poo Ling areas.<sup>35</sup> Its major effects on households included expanded access to education, health services and clean drinking water, with a resulting decline in water-borne infections and diseases such as malaria and smallpox. Family planning also brought down birth rates, while new cash crops and a growing agricultural economy in the north doubled or tripled many household incomes.<sup>36</sup>

The effects of alternative development on the Lao People's Democratic Republic, Myanmar and Viet Nam have been

<sup>29</sup>Palm farmers reported a mean net income of \$650/hectare, with the result that farmers throughout the area were now wanting oil palm. In a narrow sense, this success represented a long-term, high-risk endeavour with a high cost-benefit ratio. In a broader sense, the benefits transcended those accruing to participants and extended over a broad area. Indeed, palm may yet prove to be a "development pole" for a large region, with many future benefits. It should be noted too that many of the initial oil-palm farmers had fled drug-related violence in Upper Huallaga and so may have been more willing to risk oil palm. Also noteworthy is that UNODC's strategy was constant over the project's eight years (1991–1999) and its technical team stable.

<sup>30</sup>The violence that illicit crops often incite may explain why many farmers accept alternative development despite an expected decline in income.

<sup>31</sup>Source: UNODC.

<sup>32</sup>Princess Srinagarindra was the mother of King Bhumibhol Adulyadej, who initiated the pioneering royal project in 1969. For reasons of stability and continuity, the Mae Fah Luang Foundation, under royal patronage, was chosen to coordinate an effort that involved numerous government agencies (which invested \$20 million between 1991 and 1993 alone, more than half of it on road construction) and plans spanning an expected 30-year project life (see UNODC, "The role of non-agricultural development in the Doi Tung development project", *Alternative Development: Sharing Good Practices* . . . , pp. 73–81. The royal family is a potent symbol in Thailand, which explains its galvanizing role in highland development and its ability to coordinate the efforts of numerous public and private agencies (Renard, op. cit., p. 125).

<sup>33</sup>A desire for citizenship has been a strong enticement for some farmers to abandon opium poppy cultivation during the early phase of alternative development. According to an alternative development study in the Nam Lang area (Thai-German Highland Development Project, *Impact Assessment Study* . . . , p. 95): "Most express a strong desire to legalise their status and to improve their access to social services, as well as markets for alternative cash enterprises. Therefore, the majority of villagers show great enthusiasm when development measures are offered to them. This partly explains why many villagers are willing to abandon their involvement in opium poppy cultivation—as long as the expectations are still high and promised support is forthcoming. For this reason the cultivation of opium tends to drop most drastically during the early life of a project."

<sup>34</sup>UNODC, "The role of non-agricultural development . . .", p. 75.

<sup>35</sup>The Thai-German Highland Development Programme, a lengthy initiative, was planned as a "programme" rather than a "project" so as to give it flexibility to respond to conditions that were still in process of discovery (Renard, op. cit., p. 96).

<sup>36</sup>Bundesministerium für Wirtschaftliche Zusammenarbeit, *Evaluation of the Project* . . . , p. 70; and UNODC, "Thai-German . . .", pp. 92 and 93.

fewer. Initiatives there have, unlike in Thailand, where large well-funded efforts have lasted 15 to 30 years, been brief and funds are scarce. A confusion of ethno-linguistic groups, vertical social structures discouraging grass-roots participation, armed conflict, forced eradication (to meet opium-reduction goals) without economic alternatives and peasant mistrust have slowed alternative development.

Myanmar's major poppy-growing area is eastern Shan State, where the Wa alternative development project began in 1998 in Wa Special Region 2, working with 7,800 households spread over 1,300 square kilometres (sq km).<sup>37</sup> Despite slow progress resulting from the mistrust borne of years of armed conflict, the project made laudable gains on the health front: all children under age three have been vaccinated, thus reducing infant mortality; and leprosy has been eliminated in an area that had had rates four times higher than elsewhere in Myanmar. The project brought electricity to one township, built 10 primary and 2 middle schools (Wa illiteracy rates are high), brought potable water to 2 townships and 16 hamlets and built 15 km of roads.

The so-called Palavek project (1989-1996), operating in Xaisomboun, Hom District, Lao People's Democratic Republic, provided Hmong farmers with simple post-harvest technology, road infrastructure (though maintenance has been a problem) and support to sell small livestock. The initiative is best known, however, for: (a) initiating the first village-based treatment and rehabilitation programme in a country where over half of the opium produced is consumed in the impoverished highlands; and (b) showing that strong clan leadership and community involvement can reduce the cultivation of opium poppy without forced eradication or punishment.<sup>38</sup>

<sup>37</sup>Seventeen armed groups signed ceasefire accords with the Government of Myanmar in 1989, after decades of war, but the central Government still has little control over some areas and mistrust runs high. The UNODC-supported project emerged (Phase II began in 2002) to support the commitment of Wa authorities and the central Government to make the Wa region opium-free by June 2005 (see Government of Myanmar, *Country Paper of Myanmar Endeavors on Drug Control and Alternative Development*, December 2001); UNODC, "Wa alternative development project", *Alternative Development, Sharing Good Practices . . .*, pp. 49-53).

<sup>38</sup>Leik Boonwaat, "An overview of alternative development and illicit crop eradication: policies, strategies and actions in the region", *Alternative Development, Sharing Good Practices . . .*, p. 144; and "Achievements and lessons learned from a balanced approach to opium elimination in the Lao PDR (2001-2004)", paper presented at a meeting on removing impediments to growth, held in Doi Tung, Thailand, from 13 to 19 November 2004.

<sup>39</sup>Also, with reduction in the fallow period, weeds and insect pests soon rise to uncontrollable levels.

<sup>40</sup>The recent forced poppy reductions in both Myanmar and the Lao People's Democratic Republic have threatened the livelihood of some of the hill tribes, who sell opium to secure food. As Chouvy notes (op. cit.):

"While the World Food Programme provided the Kokang area [northern Shan State, Myanmar] with emergency assistance last year, in Laos, the government chose over the last few years to relocate some 25,000 hill-tribe people (Hmong, Akha, and others) from their rain-fed mountains to the valleys where irrigation offers higher rice production potential. However, the United Nations Office on Drugs and Crime has acknowledged that crop-substitution projects have been implemented only in a few areas and that they are too few to make up for these drastic changes. Moreover, having been moved from malaria-free hilltops to malaria-infested valleys, often without adequate developmental and health measures, many displaced communities have been ravaged by malaria and, also, by dysentery. Resettled villages now experience a 4 per cent annual mortality rate on average (as high as 20 per cent in one specific village) when the national rate is only 1.2 per cent."

## Environmental sustainability

Alternative development projects in the Andean region, except for a few in highland opium poppy-growing areas, tend to be situated in the tropical lowlands, whereas the projects in South-East Asia are mostly in the uplands. Stabilizing shifting agriculture is a challenge in both regions, but especially in Asia, where upland population growth has reduced the fallow cycle, causing land degradation and falling yields.<sup>39</sup> Soil erosion is a baneful result in both regions, but, again, more so in Asia, where it gives the ruling classes of the lowland river plains, as in the Lao People's Democratic Republic, more reason to resent highlanders.<sup>40</sup>

Numerous Andean projects have promoted tropical tree crops. The more common include coffee, oil palm, cacao, rubber and peach palm, which not only grow well in humid climates with thin soils, but also allow farmers little time or space to cultivate coca bush. Oil palm cultivation in Peru is a classic example. In Bolivia, UNODC has promoted forestry and agro-forestry for nearly a decade in the Chapare region in order to stabilize shifting agriculture by teaching farmers to cut selectively, sell the wood and replant fast-growing harvestable wood species. They meanwhile plant crops for food and sale. This forest management project, unlike most alternative development initiatives, has had a substantial influence on government forestry policy and legislation.

In Thailand, the Thai-German Highland Development Programme improved watershed management and the ecological balance in general. Key to this was community-based management of natural resources, which evolved in

parallel with a growing appreciation of local participation.<sup>41</sup> Yet, one caveat applies to the Programme:<sup>42</sup> “Commercial agriculture can override ecological concerns and affect income distribution.” Also in Thailand, the Doi Tung project reforested a denuded landscape and initiated dramatic changes in land use. The project reduced the cultivated area, yet increased peasant income from agriculture while opening up new income sources for former opium poppy farmers<sup>43</sup> (see also annex III). The reforestation also had salutary environmental effects on relative humidity, temperature, rainfall and fire incidence—not only in the project area, but also further abroad in the province (see annex IV).

*“Initial attempts at conservation involved enforcing the existing laws to resettle people from protected areas. This was strongly resisted by communities with the help of NGOs, who by this time were part of an emerging environmental movement. . . . Private sector involvement in commercial reforestation also proved unpopular with local communities. The [Thai Forest Sector Masterplan] contended that there was no longer any other way to proceed but by involving local people in forest management.” Thai-German Highland Development Programme, Review of TG-HDP’s Agricultural and Forestry Programmes, 1984–1998, with Special Reference to Community-based Natural Resource Management, Internal Paper No. 212 (Chiang Mai, 1998), vol. 1, p. 26.*

## Gender roles

Since about 1990, projects have with varying resolve addressed gender, as that notion has evolved and been understood. The author of a key gender report says that gender is a “perspective” not a project “component” and shows how adopting the perspective—how understanding sex-based roles—can help projects meet their objectives.<sup>44</sup>

In the Andean region, growers of illicit crops, with some exceptions, share kin structures and values with the ruling classes. Peasant women confront not only a society-wide *machismo* that subordinates them to men, but also high illiteracy rates and spousal abuse, ills deriving from exclusion and a tense, hard life on the edges of society. In Asia, opium poppy growers belong to a myriad of ethnic groups, each with gender norms that differ from those of the prevailing national culture. The Hmong, for example, are organized into patrilineal clans, the Karen are matrilineal and matrilocal. Development often ill prepares such groups for national society, where they succumb to self-destructive lures and pressures. In many hill peoples, women tend the opium poppies and earn the family income.<sup>45</sup> With the eradication of poppy cultivation, this role vanishes, with often dire results: many women enter the sex trade.<sup>46</sup>

<sup>41</sup>Thai-German Highland Development Programme, *Review of TG-HDP’s Agricultural . . .*, op. cit., and *Case Studies of Experiences in Implementing Community-based Land Use Planning and Local Watershed Management and Sustainable Farming Systems (1984–1998)*, Internal Paper No. 212 (Chiang Mai, Thailand, 1998), vol. 2; and United Nations Office on Drugs and Crime, “Thai-German . . .”, op. cit.

<sup>42</sup>German Agency for Technical Cooperation (GTZ) and UNODC, *The Role of Alternative Development in Drug Control and Development Cooperation, International Conference, January 7–12, 2002* (GTZ, Feldafing (Munich), Germany, 2004). But overall sustainability, as programme management notes, may depend on how the Government of Thailand manages the institutional, policy, and legal frameworks (United Nations Office on Drugs and Crime, “Thai-German . . .”, p. 95):

“According to Royal Forest Department (RFD) regulations, many villages are situated illegally in national forest reserves, and in some cases even in wildlife sanctuaries. In the absence of formal land use rights and a legal framework (Community Forest Act) that gives community groups the opportunity to manage local forest areas, highland communities remain exposed to changing interpretations and applications of government policies. The overall sustainability of highland development is only as strong as the national institutional framework within which all stakeholders are operating.”

<sup>43</sup>UNODC, “The role of non-agricultural . . .”, p. 75.

<sup>44</sup>Eva Dietz, *Gender and Alternative Development* (Eschborn, German Agency for Technical Cooperation, 2000). While a gender perspective certainly includes equity, it is about more than improving the quality of life of women. It is about household roles, and the relationship between those roles, and how those roles and that relationship shift in the face of technological innovations and development-induced change. It is about men as much as about women. In a word, it is about the welfare of family and household.

<sup>45</sup>According to one observer in the Lao People’s Democratic Republic (Bandith Prathoumvanh, “Gender and alternative development in Lao PDR: a case study of Lao Women’s Union”, *Emerging Gender Strategies for Alternative Development: Regional Seminar on Alternative Development: Information Networking and Sharing Good Practices on Gender Development*. Publication No. 4/2004 (Bangkok, UNODC Regional Centre for East Asia and the Pacific, 2005), pp. 35–40):

“Women contribute about 62 percent of labor for opium production, while men are involved in clearing and burning the fields and the construction of fences around the opium fields. Women are responsible for poppy land preparation, sowing seed, weeding the crop, and harvesting the gum.”

Leik Boonwaat, a Chief Technical Adviser for UNODC in the Lao People’s Democratic Republic, says (“Gender mainstreaming . . .”, p. 20):

“Women are the mainstay of their households and do the majority of household work as well as generate up to 80 percent of the household cash income working in the fields, especially in the labor intensive aspects of opium production, but most highland ethnic groups award women with little status or opportunity. Educating girls is given a low priority and their decision-making role outside the household is severely limited.”

<sup>46</sup>At the outset of the Doi Tung project, cash came not only from opium, but also from young women sent or sold to work as prostitutes in the cities (UNODC, “The role of non-agricultural . . .”, pp. 74 and 75).

Annex V shows the gender structure of the 191-household Peru survey. Except in the United Nations project in Neshuya, men outnumbered women (figure I). Migration history may explain this: recent migrant households had fewer women. Women headed 10 households, as a result in all cases of male death or absence. Annex V also shows that men in the sample had received more education than women, especially after age 25 (figure II). The gap was smaller among people aged under 25, a reflection of the expansion of primary education in the rural areas in recent years. Finally, annex V compares women's participation in alternative development projects when they began and now (figure III). One interpretation of the results is that projects began by examining mostly men's production activities. Several respondents said that the problem of low participation of women in UNODC project decisions on palm cultivation had simmered until it had had to be addressed.<sup>47</sup>

In Asia, the Thai-German Highland Development Programme involved women in the development process. They benefited from improvements in health, education and subsistence agriculture.<sup>48</sup> The Doi Tung project focused strongly on women—training them and securing jobs for them (see annex VI). The Thai field study reported that alternative development had increased women's participation in family and village decisions as well as in income generation. Their access to education had increased only slightly over that of men. It reported that male addiction rates in some Karen villages, where men sold livestock to fund their habit, had caused work to fall heavily on women. This may explain why women often played an effective role in drug-abuse prevention, treatment and rehabilitation,<sup>49</sup> but the study also reported that development had reduced women's control of resources, expanding male household economic roles at their expense.

The gender issue in Asia is unusually complex. The overall impact of alternative development on women there has been mixed. In both regions, it must do more to understand household gender roles and how they shift in relation to each other in response to technological change.

*"Most women believe that their families would not survive without the money they get from opium production." Bandith Prathoumvanh "Gender and alternative development in Lao PDR: a case study of Lao Women's Union", *Emerging Gender Strategies for Alternative Development: Regional Seminar on Alternative Development; Information Networking and Sharing Good Practices on Gender Development*, Publication No. 4/2004 (Bangkok, UNODC Regional Centre for East Asia and the Pacific, 2004), p. 36.*

## Conflict resolution

The relation between alternative development and conflict resolution has been little studied,<sup>50</sup> although one clearly does exist. Drug-related conflicts occur all along the chain from the producer of illicit crops to the inter-State level. Whatever alternative development does to reduce illicit crops at the base, therefore, reverberates upwards. At the top, drugs fuel civil conflicts and international terrorism.

The more immediate impact of alternative development on conflict resolution occurs at the household and community levels. Not only is conflict deriving from social decomposition endemic to communities that grow illicit crops, but overt violent conflict stemming from the drug trade and criminality, or from insurgent movements, is not uncommon. Effective household and community participation, themselves key to instituting sustainable alternatives, often require prior restoration of the social fabric in order to reduce internal conflict and allow minimal consensus. Helping households and communities cope with the causes and consequences of conflict, and creating a strong civil society, are thus inherent to alternative development.

As noted, the households in the Peru study cited peace and security as the major impact of alternative development—and its most sustainable (see annex VII). In that regard, UNODC has worked to create and strengthen

<sup>47</sup>A gender study of a UNODC project in Huallaga concluded that activities developed along the way to mainstreaming gender equity were part of a process that needed to be strengthened and that farmer organizations should promote the equitable development of their membership (Mathilde Pulgar, *A Study of Gender in Lower Huallaga* (Lima, UNODC, 2003), p. 43). A gender study of Bolivia projects held that there were not sufficient mechanisms in place to ensure gender mainstreaming in alternative development projects in Bolivia. Lessons learned showed that better integration of gender perspectives was needed (Kitty Bentvelsen, *UNDCP Gender Mainstreaming Mission to Bolivia: Chapare Agroforestry Project, Phase II (AD/BOL/97/C23)* (Cochabamba, Bolivia, UNODC, 2000), p. 31).

<sup>48</sup>UNODC, "Thai-German", p. 94.

<sup>49</sup>Ibid.

<sup>50</sup>For a good discussion of the issues, see GTZ, "Drugs and conflict: a discussion paper", 2003.

producer groups among Peru's migrants. The oil palm work is but one case. In Myanmar, work with the Wa people promotes trust between them and the Government after years of war. The households in the Thai study noted that improved farmer involvement in politics and community, increased contact with public and private entities and greater self-reliance in articulating their rights had paralleled development. Yet there was also a downside: project technology had made possible dry-season cash cropping by means of irrigation and chemicals, which had led to conflicts over water supply, water pollution and harm to fisheries. And while many highlanders now had citizenship, recognition of their land rights had been slow and this too had led to conflict, as had the emigration of uplanders unprepared for life in the larger society.

Drug control itself has caused conflict, especially in the Andean region. In Bolivia, for example, rapid forced eradication of coca bush cultivation together with lagging provision of viable alternatives have produced unrest and violence.<sup>51</sup> In Peru, the field study revealed that oil palm farmers in parts of Aguaytía had had high expectations, having seen the success of oil palm cultivation in nearby Neshuya, but they claimed that their quality of life had declined as a result of the new voluntary eradication strategy. They had had to eradicate to receive technical help, yet their new trees—on 2,000 ha—were not yet mature and so produced no income. Many saw a veiled threat in the strategy: if they did not sign eradication pacts, their coca bushes would be removed by force and they would get no help. The pace of eradication had been swift, so now the farmers had no coca leaf and no income. They felt that the Government had deceived them and they threatened to hold marches and street protests.

## Sustainability of impact

The sustainability of impact is vital and has at least four important, and sometimes shifting, dimensions—

environmental, economic, socio-cultural and political/legal—but its determinants in some measure always transcend the control of alternative development projects and programmes.

In Latin America, the households in the Peru study were asked whether and how alternative development had improved their standard of living—an indicator of sustainability. UNODC projects ranked higher (see annex VII). Perception of impact closely paralleled perception of sustainability. The study devised indices for both perceptions (annex VII). The work with oil palm in Neshuya showed the greatest impact and was seen as the most sustainable. Coca bush cultivation was the main activity in 40 per cent of households before alternative development, but in only 5 per cent at the time of the study. Most households had abandoned coca bush cultivation for other forms of agriculture, or other occupations, including wage labour.

Thailand is at present virtually opium-free and, as the Thai household study shows, alternative development played a part in reducing opium production by introducing alternative crops, new sources of income and new opportunities. Government services had expanded in education, health and agriculture. There was a downside here again, however: in some areas there was more debt, uncertain income and migration to urban areas in search of work. In the Lao People's Democratic Republic, farmers in the Palavek project were opium-free five years after that project ended.<sup>52</sup>

*"I once made a trip with some journalists to Nam Lang. We asked a farmer there to tell us the most important impact of the project. In the midst of the coffee plants and the cattle, he said: 'We feel more secure here now because we are in a position to negotiate with the Government. Officials don't come and threaten us anymore. We're more confident in explaining our position'"*  
Alternative development official, Thailand.

<sup>51</sup>See Kathryn Ledebur, "Bolivia: clear consequences", *Drugs and Democracy in Latin America: the Impact of U.S. Policy*, Coletta A. Youngers and Hielen Rosin, eds. (Boulder, Colorado, and London, Lynne Rienner Publishers, 2005), pp. 143-184. A United States General Accounting Office report (*Drug Control: Efforts to Develop Alternatives to Cultivating Illicit Crops in Colombia Have Made Little Progress and Face Serious Obstacles*, Report to Congressional Requesters (Washington, D.C., February 2002) addresses aggressive forced eradication:

"More recently, the rapid pace of the Bolivian government's eradication campaign has created gaps between eradication and alternative development assistance that can leave peasant farmers without livelihoods. The Bolivian plan has been to remove itself from the coca-cocaine business by 2002. According to a US embassy official in Bolivia, the schedule for the eradication process was compressed because the current government wanted to complete the effort before the 2002 presidential election. As a result, coordination between eradication and alternative development became very difficult."

<sup>52</sup>Leik Boonwaat, "An overview . . .", p. 144. Given that more than half of the opium produced in the Lao People's Democratic Republic is consumed locally, in the impoverished highlands, the project's village-based treatment programme, the first in the country, may have played an important part.

## III. Conclusions and lessons learned

*Alternative development extends the writ of the State by drawing socio-economically marginal human groups and areas into the wider socio-economic structure. It improves security and encourages investment. Alternative development is more than agriculture. It includes non-farm options to diversify income. It supports the sustainable reduction of illicit crops by improving livelihoods. Above all, it rests on a firm belief that drug control is a development matter, a belief that must inform policy at all levels and must be part of planning.*

### Formulation of policy and monitoring of impact

- The formulation of alternative development policy works best when all stakeholders—donors, Governments, non-governmental organizations and beneficiaries—participate and come to a consensus.

A lack of international consensus creates adverse conditions for national policy formulation. The United States, for example, provides 95 per cent of Peru's alternative development funds, but does not allow their use for alternative development "unlinked" to eradication. European donors place no such restrictions. National consensus has several dimensions. Firstly, farmers growing illicit crops must be treated as development candidates and not criminals. This means consensus among legislative, law-enforcement and development agencies. Next, all stakeholders, from donors to communities, must agree on development goals and processes. Advisable also are mechanisms among them for joint oversight, communications and information exchange.

- The formulation of policy requires flexibility to adapt to particular regions and situations. It must accommodate local knowledge, skills and culture.

The situation of growers of illicit crops can vary from one region to another of a country. Alternative development must thus respond flexibly. In Thailand, some early alternative development sought national development at the cost of local culture. Ill-prepared highlanders fell prey to crime, heroin use, prostitution and HIV/AIDS.

- Community participation throughout the project cycle—feasibility assessment, planning, project design, implementation, monitoring and evaluation—is vital.

Participation is doubly important in milieus with a history of exclusion. A long-term process, participation is democracy's crux: it boosts transparency, creates a local sense of ownership, builds institutions and strengthens civil society. Still, it is often poorly practised.<sup>53</sup>

*"A 'participatory approach' means more than just consulting communities about their wishes. It requires serious dialogue in which these communities are allowed to have substantial leeway for negotiation." German Agency for Technical Cooperation and United Nations Office on Drugs and Crime, *The Role of Alternative Development in Drug Control and Development Cooperation; International Conference, January 7-12, 2002* (German Agency for Technical Cooperation, Feldafing (Munich), Germany, 2004), p. 25*

- Decentralized decision-making and the empowerment of local communities increases the quality of development assistance as well as the chances of sustainability.

To support participation, alternative development must often create, and invariably strengthen, local organizations.

<sup>53</sup>The *World Drug Report for 2000* notes that "Integrated rural development projects, as they were designed, still failed to meet expectations ... One key flaw was that local communities participated little, if at all, in the actual design of the programs themselves." (Quoted in Martin Jelsma and Pien Metaal, "Cracks in the Vienna consensus: the UN drug control debate", *Drug War Monitor*, vol. 3, No. 1 (2004), p. 12.)

This is local empowerment. The Asian study reveals that Governments and development entities have often failed to empower highland communities, whether from fear of losing control or from entrenched patron-client attitudes.

- Impact must be monitored at the household level. This requires use of quantitative and qualitative indicators to measure human development as well as drug control.

Measures of alternative development progress have typically not considered changes in the quality of life of households, either objectively or subjectively (baselines rarely exist), and so have not clarified household decision-making. Monitoring impact on households allows “local” understanding—what works, what does not and why. Indicators must be qualitative as well as quantitative: alternative development is successful in as far as direct beneficiaries believe it is. Once subjective and objective baselines have been set up, the indicators must be closely monitored. Failure of subjective (the household view) and objective indicators to square indicates a problem.

Alternative development workers often do not know enough about their target population: how the households are structured and how they take decisions. The household is not a black box. Role division occurs within it, along age and gender lines. The creation of baselines will help to clarify this and thus remedy a major shortcoming: the failure to understand and respond to gender roles.

## Political commitment

- Political commitment cannot be ad hoc. It implies long-term human development, reasonable drug control laws, respect for human rights and a coordinated inclusion of illicit crop reduction (law enforcement and alternative development) in national and regional planning.

Ideal long-term national commitment, still distant, means altering laws as well as public institutions, policies

and programmes in such a way that marginal peoples, living in marginal areas, become citizens, de jure and de facto. The result would be good governance and respect for human rights, which would reduce the cultivation of illicit crops permanently. Meanwhile, however, Governments could mainstream alternative development by directing line development agencies—ministries of agriculture, transportation, health and education—to address the needs of marginal peoples. As a caveat, it should be noted that donor aid, provided in the name of co-responsibility, can also reduce commitment, which national resource investment encourages and bears witness to.

## Development as drug control

- Alternative development projects led by security and other non-development concerns are typically not sustainable—and may result in the spread or return of illicit crops or in the materialization of other adverse conditions, including less security.

In the Andean region, as noted above, two alternative development strategies play out among donors and host Governments: one of them security-led, which treats illicit crops first as a law enforcement issue and calls for direct eradication, with prompt results; the other development-led, which treats them as a poverty issue and calls first for poverty reduction, with results over time. Early alternative development in Asia in the 1960s, when insurgency loomed, was security-driven. Nowadays security concerns again press on alternative development—in both regions.<sup>54</sup> Afghanistan and Colombia are two examples.

Experience in Asia shows that a blind nation-building zeal can translate into forcing hill peoples into a lowland mould, with consequent disregard for their culture and their human rights. The resulting social disorder and anomie favour neither sustainable drug control nor nation-building.

<sup>54</sup>In Peru (and Colombia), the United States argues that public resources will never be enough to reduce illicit crop cultivation through development. The private sector is needed, but it will not respond without security. Therefore, coca reduction—eradication—must precede development. This reversal of logic—drug control as development—is ironic: whereas development had before been part of a broader strategy to reduce coca, now coca reduction was part of a strategy to induce development (interviews from the UNODC Peru study).

*"In the opium poppy growing regions of Laos, the same issues relate to opium and poverty. To eliminate both is a long-term process that cannot stop even after most farmers have stopped cultivation." Leik Boonwaat, "Gender mainstreaming in the balanced approach to opium elimination programme in the Lao PDR", *Emerging Gender Strategies for Alternative Development: Regional Seminar on Alternative Development; Information Networking and Sharing Good Practices on Gender Development*, Publication No. 4/2004 (Bangkok, UNODC Regional Centre for East Asia and the Pacific, 2004), p. 24.*

Successful alternative development requires that households trust implementers. Confidence is a primary alternative development asset, for households are asked to submit to actions whose impact on them is in the hands of others. Respondents in the Peru study cited failure to keep promises as the major cause of poor results (see annex VIII). Keeping promises is key to maintaining confidence.

A lack of sustainable markets for alternatives is a serious constraint. The promotion of non-marketable alternatives is a common failure and a major reason for farmer mistrust. In order to be successful, alternative development projects need to identify reliable markets at the local, national and/or international levels and to link the products or services to be promoted by alternative development activities to those markets.

In sum, favouring counter-narcotics or other goals over development ones makes for haste and undermines sound development; the chances of alternative development failure rise. It may also prompt unrealistic projects in areas where illicit crops are grown (of low environmental potential for sustainable alternatives) rather than in zones of migrant origin or in other more suitable sites.

- Alternative development requires an appropriate policy/legal framework, one that allows growers of illicit crops to be treated first as candidates for development rather than as criminals.<sup>55</sup>

- Alternative development is more effective and more sustainable as part of a wider development scheme whose goal is to improve the livelihoods of marginal rural populations.

In the Andean region, countries have often created an extraneous entity to coordinate, even implement, alternative development—PDAR in Bolivia, the National Alternative Development Plan (PLANTE) in Colombia or DEVIDA in Peru. Such entities are often seen as needed in order to respond to the special situation of illicit crops. While they may be attractive to donors and may enable countries to obtain and manage resources better, the arrangement can offend line development agencies such as ministries of transportation, agriculture and sustainable development. Since the extraneous entities are by nature short-term, such offence can compromise commitment and sustainability. Such entities are less frequent in Asia.

#### *Common causes of mistrust and negative outcomes*

- Lack of consensus with the participants in the selection of alternatives and strategies.
- Haste to achieve or show results at the expense of good development practices.
- Eradication of coca bush prior to the establishment of viable alternatives.
- Prioritization of coca bush reduction over the welfare of farmer-producers.
- Unkept promises to local producers.
- Poor technical support for alternatives.
- Lack of donor and government transparency in the management of resources.
- Promotion of alternatives that are not sustainable (for varying reasons).
- Unreliable markets for alternative products.
- Inadequate participation of local farmers, local leaders and local organizations.

*Source: Peru field assessment (see also annex VIII).*

<sup>55</sup>Alternative development policy/legal "space" is greater in Bolivia and Peru than in Colombia, where Law 30 criminalizes the planting of coca (except small amounts allowed native groups for traditional use), marijuana or opium poppy and allows prosecution of violators. Law 30 underlies a massive aerial spraying programme, which dwarfs alternative development. Peru's Decree Law 22095 makes all coca illegal except that grown by farmers registered with a state-controlled purchasing agency. Cultivation per se, however, say some Peruvian legal experts, is a crime only in national parks. Bolivia's Law 1008 makes all coca bush cultivation illegal except that in statutorily defined traditional areas.

## Eradication and conditionality

- The eradication of illicit crops on peasant farms lacking viable alternatives undermines development.

*"At the production level, a key lesson is that eradication of illicit narcotics in the fields alone will not work and is likely to be counterproductive, resulting in perverse incentives for farmers to grow more drugs (e.g., in Colombia), displacement of production to more remote areas, and fueling of violence and insecurity (e.g., Peru, Bolivia, Colombia), which in several cases forced the eradication policy to be reversed and led to adverse political outcomes. Neither does the approach of making eradication a condition for development assistance work—without alternative livelihoods already in place, premature eradication can alienate the affected population and damage the environment for rural development."* William Byrd and Christopher Ward, *Drugs and Development in Afghanistan*, Conflict Prevention and Social Reconstruction Paper No. 18 (Washington, D.C., the World Bank, 2004), p. 13.

Forced eradication is at best a dubious practice.<sup>56</sup> Creating unrest and violence, it compromises development—and long-term nation-building, itself a key to lasting drug and crime control.<sup>57</sup> Yet law enforcement does have a role as a negative incentive: the households in the Thai study cited fear of arrest as one of the main reasons they abandoned opium poppy cultivation, but only after they had viable alternatives. Speaking for Asia, Chouvy says (op. cit.):

"The sharp fall in production in Myanmar and Laos, where opium production was halved during 2002–2003 and again during 2003–2004, was achieved by forced reductions through opium bans and eradication, and these measures are already having a detrimental impact

on farmers, because no viable alternative livelihoods have been promoted . . . Human costs are also to be considered, as these reductions of the main cash crop in such a short time in areas where rice shortages are severe have had dire consequences for the local populations, who have no other way of coping with such shortages than the opium economy."

Voluntary eradication, also problematic, involves some form of "conditionality", typically stated in a written agreement with communities or households. The sequencing of alternative development and eradication enters here, that is, whether eradication should precede alternative development, happen at the same time or occur only when sustainable alternatives allow a viable income.

Households in the Peru study cited loss of income, associated with coca bush eradication through conditionality, as the greatest negative effect of alternative development (see annex VII). Respondents in the Thai study also rejected conditionality.

*"King Bhumibol Adulyadej contributed to highland development work in other ways. Among the most influential was his guideline that opium poppies not be destroyed until viable alternatives existed. The King realized that the radical removal of the hill people's source of income would imperil them."* Ronald D. Renard, *Opium Reduction in Thailand 1970–2000* (Bangkok, Silkworm Books, 2001), p. 7.

In farmers' minds, conditionality tended to associate alternative development with law enforcement. This association can be fatal for alternative development: the two functions must always remain separate. It has been argued that eradication can succeed if coordinated with

<sup>56</sup>The Action Plan on International Cooperation on the Eradication of Illicit Drug Crops and on Alternative Development advocated by the General Assembly at its twentieth special session in its resolution S-20/4 E noted that, in cases of low-income production structures among peasants, alternative development is more sustainable and socially and economically more appropriate than forced eradication.

<sup>57</sup>A Huallaga peasant, now a militant protester of Peru's anti-drug policies, tearfully described to a researcher in Aguaytia the scene of helicopters landing in her community, wind from the rotors destroying food crops and lifting straw roofs from houses, soldiers jumping out firing their guns to intimidate residents while an army of workers entered the fields to uproot coca. The event, she said, traumatized her young child, who today suffers neuroses. In Colombia, the State often first appears to forgotten rural citizens in the form of armoured helicopters and crop dusters. Anger and despair lie in the wake of the spraying, which drives people into one of the armed groups or into the growing ranks of the displaced. As a local peasant leader told a UNODC researcher:

"The spraying kills everything. People leave for other parts of the county or settle on the fringes of local towns. And some go deeper into the forest to plant coca again."

alternative development, but the record on coordination is poor. In both Bolivia and Colombia, eradication has far outpaced alternative development, with consequent unrest, human displacement and hardship.

*"I will never forget the remarks of the Australian ambassador during a helicopter trip to Doi Sam Mun, Chiang Mai province, when he asked: 'Why has opium poppy been planted in that coffee field?' I answered: 'Opium poppy was not planted in that coffee field; coffee was planted in that poppy field.'" Richard Mann, quoted in Renard, op. cit., p. 83.*

## Law enforcement as interdiction

- Law enforcement is vital to successful alternative development, but, to be effective, it must use strategies to reduce demand at the farm gate rather than directly target peasant farmers.

Rather than target peasant growers of illicit crops, as in forced eradication, law enforcement should interdict supply lines—of chemicals or of processed or semi-processed drugs—arrest and prosecute traffickers and disrupt clandestine laboratories and financial markets. Where opium is consumed on the farm, alternative development must promote village-level drug treatment.<sup>52</sup>

## Recommendations

### Political commitment, institutionalization and coordination

- A firm political commitment needs to be made to conduct alternative development in coordination with all stakeholders so that it is sustainable and has human development as the ultimate aim.*
  - Drug control should be instituted at a high enough political level to allow it to include human development.
  - A legal framework for drug control should be established that allows small-farm cultivation of illicit crops to be addressed in development terms.
- A global partnership should be established between development entities and national groups to make reducing the cultivation of illicit crops a cross-cutting issue, thus maximizing the impact of efforts.*
  - Awareness needs to be raised that addressing the multiple causes of illicit-crop cultivation—an unsustainable livelihood strategy—is required for sustainable development.
  - As part of the partnership, an alternative development information clearing house should be set up to record experience and allow all parties to learn what works, what does not and why.
- An effective inter-ministerial body should be established:*
  - To coordinate and monitor drug control and development, with participation of line development agencies in illicit crop reduction.
  - To make illicit crop reduction a part of national and regional development plans.
  - To ensure a comprehensive and balanced drug control strategy, with prevention and education, law enforcement, demand reduction and alternative development.
- The elimination of illicit crops should be conditional on improvements in the lives and livelihoods of households. It should not be a prerequisite for development assistance.*
  - Illicit crops should be eradicated only when viable alternatives exist for households participating in alternative development. Successful alternative development requires proper sequencing.
- Interdiction should play a key support role in illicit crop reduction by:*
  - Extending the rule of law.
  - Creating an environment for economic and political development.
  - Lowering farm-gate prices for illicit crops to make alternatives more attractive.

### Alternative development as value added

- Alternative development should play a pioneering and catalytic role by charging it with:*
  - Establishing a state presence, with state services, in marginal areas, thereby promoting law enforcement, good governance and drug demand reduction.
  - Incorporating the community as principal actor in the development process—from feasibility through design, execution, monitoring and evaluation.
  - Promoting trust by improving, inter alia, health, education and food security.
  - Promoting immediate income opportunities, then medium- and long-term ones.
  - Promoting market-driven production alternatives.
  - Looking beyond agriculture to promote non-farm opportunities.

- Facilitating investment in both the public and the private sector.
- Avoiding environmental harm.
- Helping communities address new threats from amphetamine-type stimulants, heroin and HIV/AIDS.

7. *The links between drugs and conflict should be explored and constantly monitored and should be reflected in project planning and execution. The often conflicted milieu of alternative development requires this.*

8. *To sustain successful alternative development and prevent illicit crop resurgence, projects from the outset must have an exit strategy that continues the development process.*

## Knowledge management and capacity-building

9. *All stakeholders—donors and international agencies, rural communities and appropriate government entities—should be obliged to use comprehensive knowledge management in order:*

- To strengthen sharing of information and experience.
- To coordinate efforts to reach consensus on an alternative development approach.
- To use local farming knowledge and advice to plan, implement, monitor and evaluate alternative development.

10. *Appropriate baseline data should be collected and used to monitor implementation and to allow policy to be evidence-based and accountable by a better understanding of how households move from illicit to licit livelihoods.*

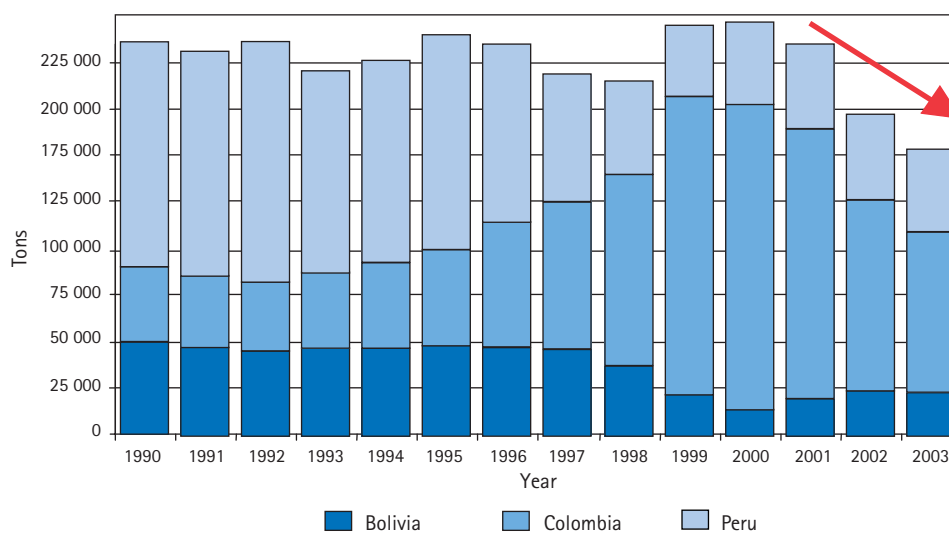
11. *Institutions and capacity-building and human resource development should be used to create an all-important mutual understanding between drug control and development agencies.*

- Human capacity should be enhanced in particular in the areas of alternative development product marketing and rural primary health care, income-generation, education and vocational training.



## Annex I. Cultivation of illicit crops

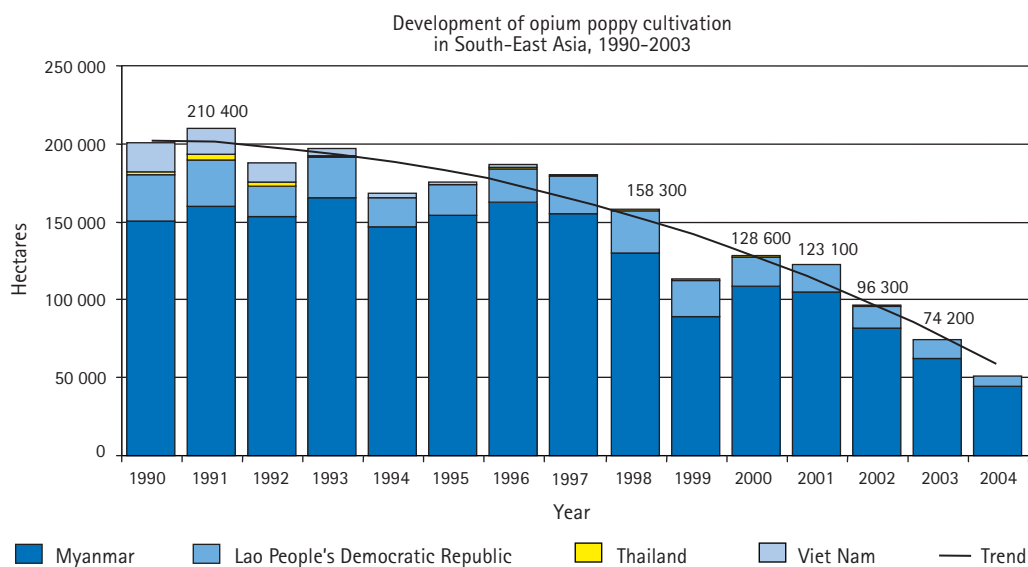
A. Coca bush cultivation in the Andean region, 1990-2003



Source: United Nations Office on Drugs and Crime.

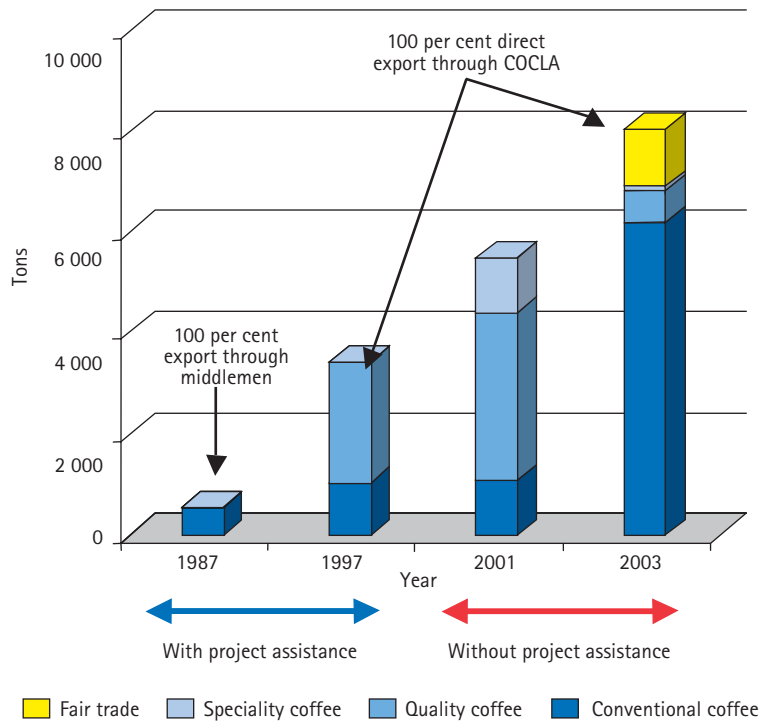
Note: The red arrow denotes a decline of 30 per cent between 2000 and the end of 2003.

B. Opium poppy cultivation in South-East Asia, 1990-2003



Source: United Nations Office on Drugs and Crime.

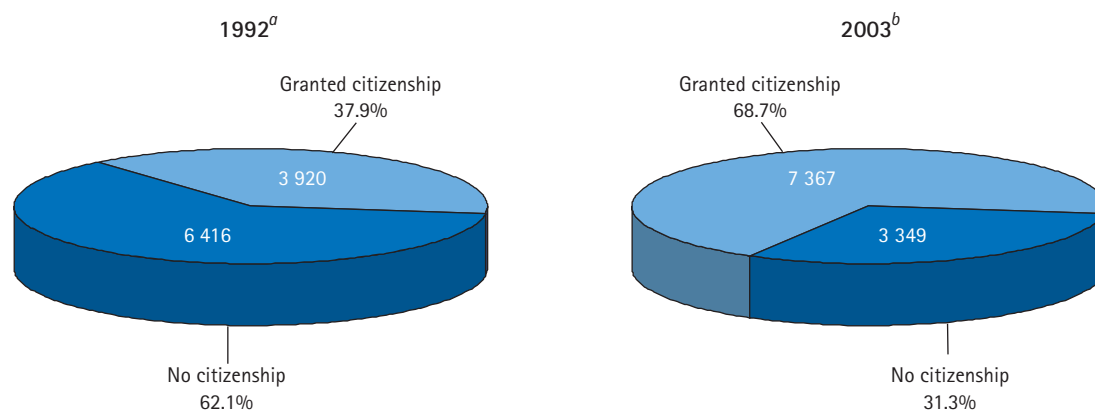
## Annex II. Export performance of the Central de Cooperativas de la Convención y Lares, 1987–2003



Source: United Nations Office on Drugs and Crime.

## Annex III. Doi Tung development projects: socio-economic indicators

Figure I. Citizenship

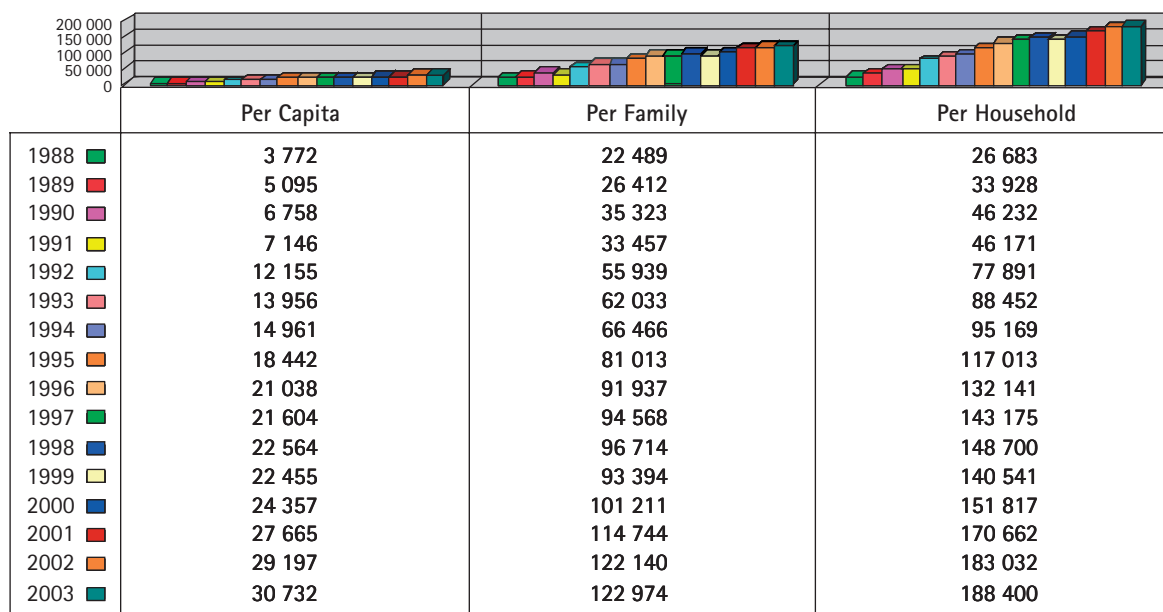


Source: Mae Fah Luang Foundation.

<sup>a</sup>From a population of 10,336.

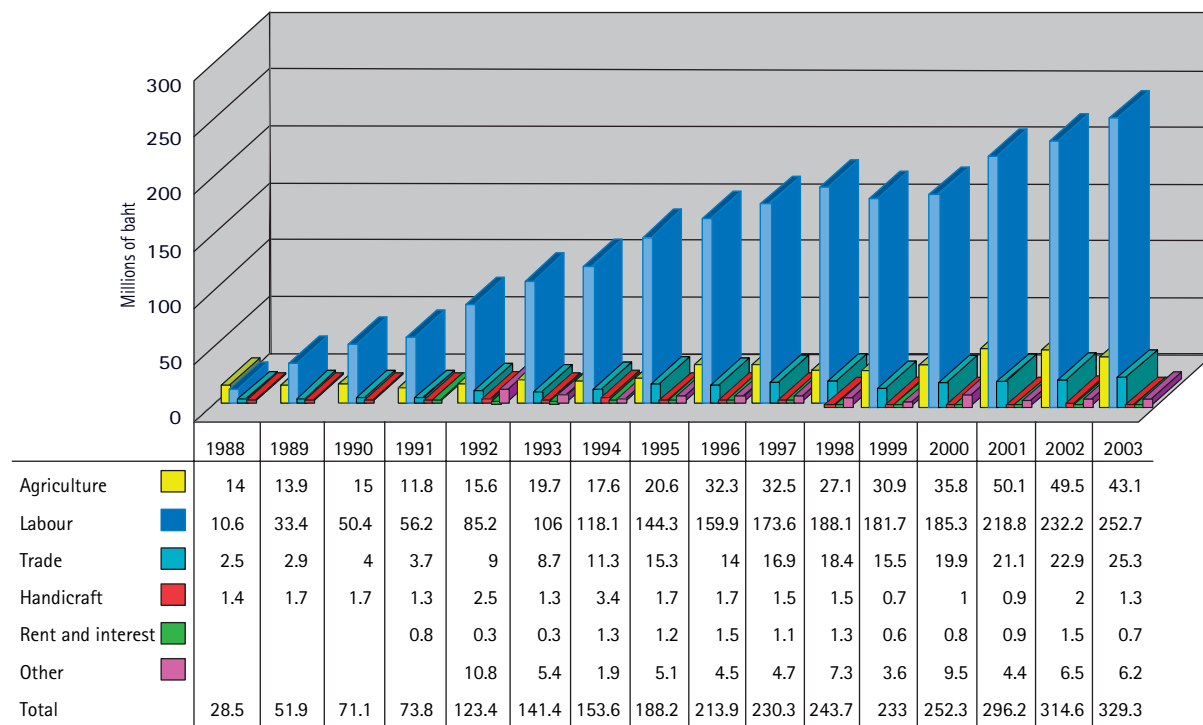
<sup>b</sup>From a population of 10,716.

Figure II. Average income  
(Baht)



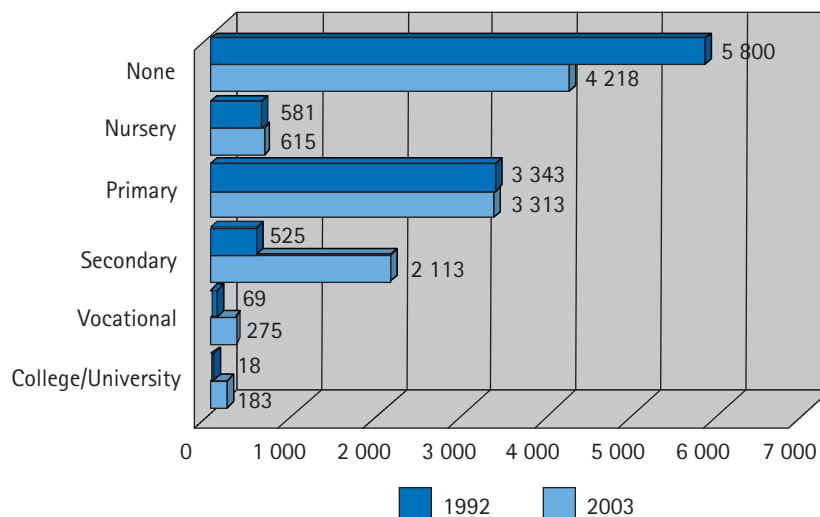
Source: Mae Fah Luang Foundation.

Figure III. Sources of income



Source: Mae Fah Luang Foundation, 2004.

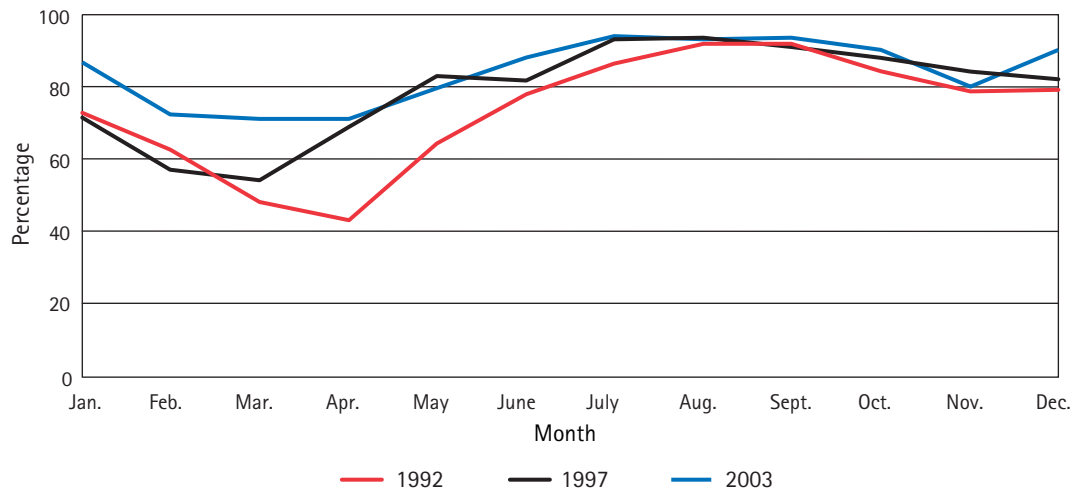
Figure IV. Education, 1992 and 2003



Source: Mae Fah Luang Foundation, 2004.

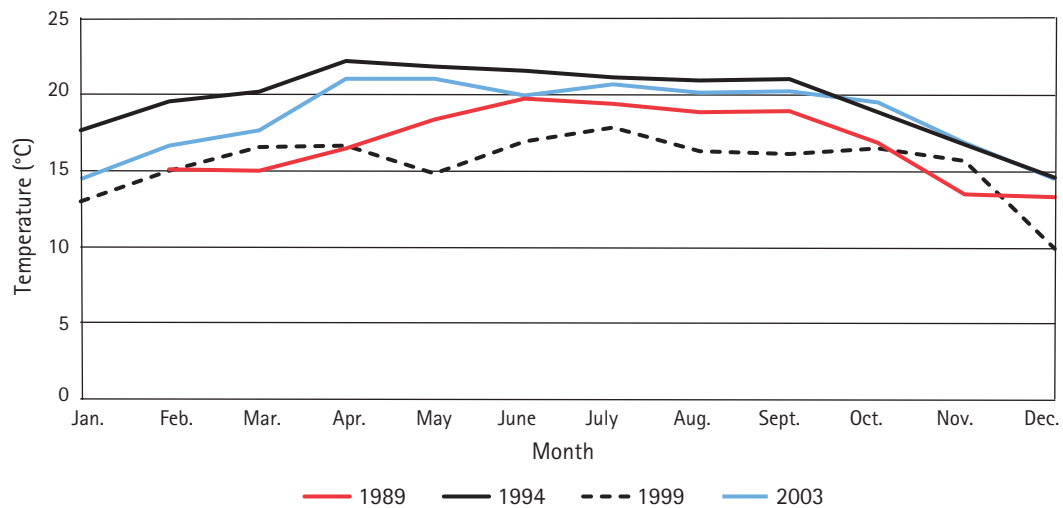
## Annex IV. Doi Tung development project: environmental indicators

Figure I. Effect of reforestation on relative humidity, 1992-2003



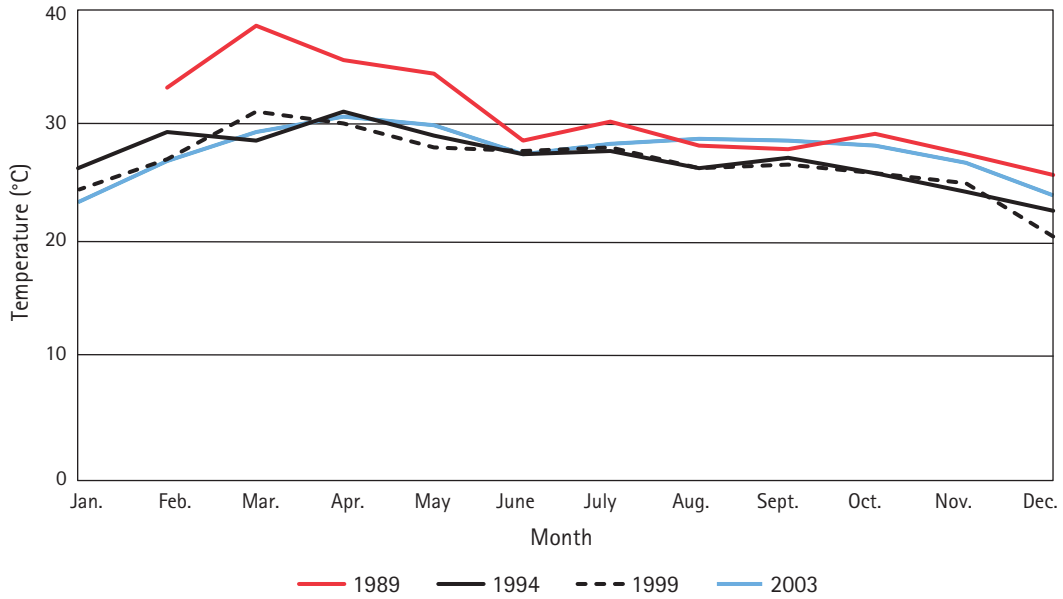
Source: Mae Fah Luang Foundation.

Figure II. Effect of reforestation on minimum temperatures, 1989-2003



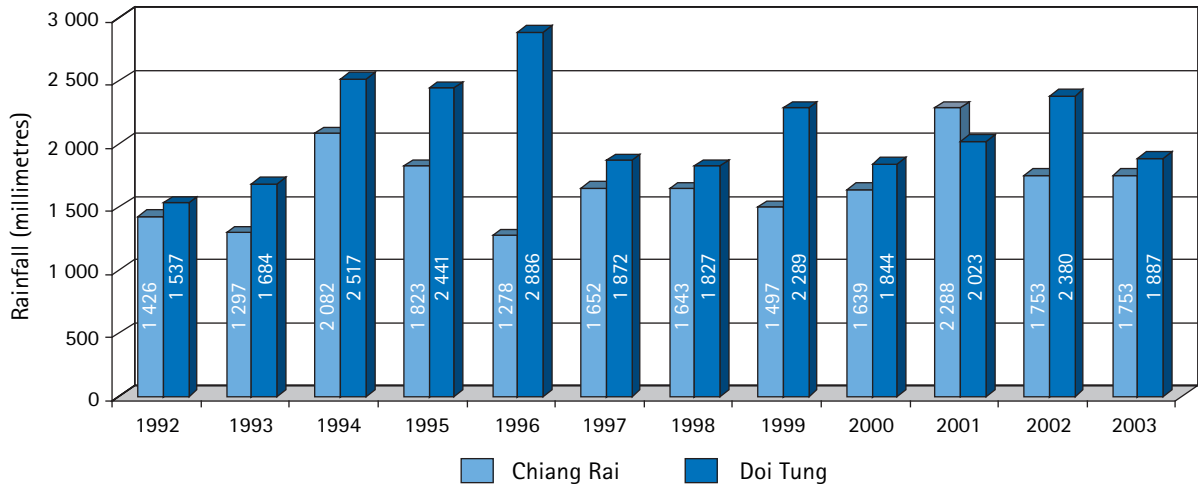
Source: Mae Fah Luang Foundation.

Figure III. Effect of reforestation on maximum temperatures, 1989-2003



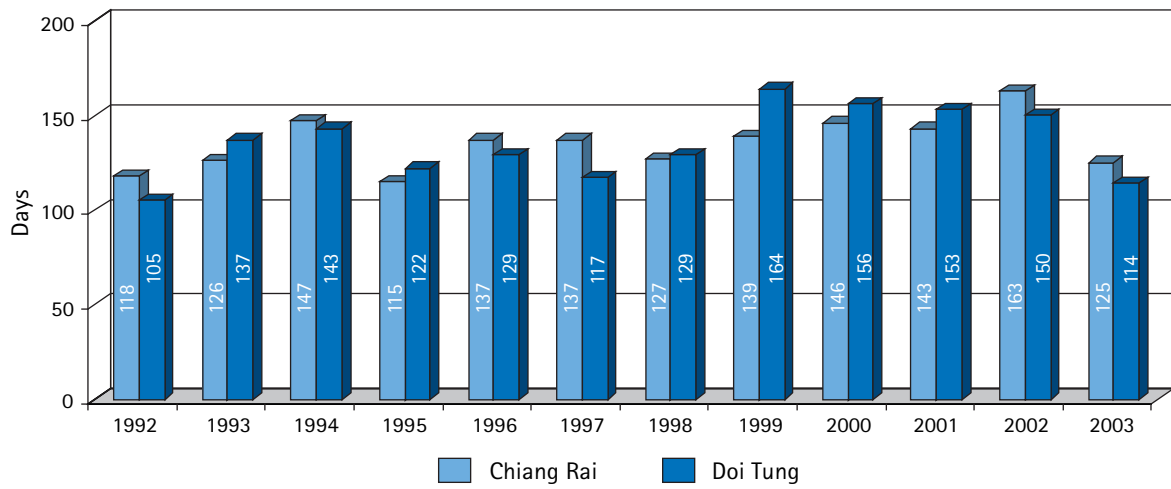
Source: Mae Fah Luang Foundation.

Figure IV. Effect of reforestation on annual rainfall, 1992-2003



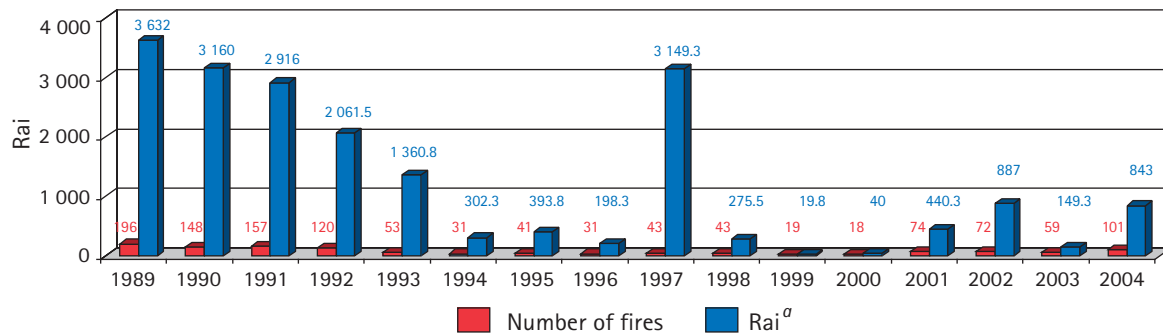
Source: Mae Fah Luang Foundation.

Figure V. Effect of reforestation on annual rainfall distribution, 1992–2003



Source: Mae Fah Luang Foundation, 2004.

Figure VI. Incidence of forest fires, 1989–2004

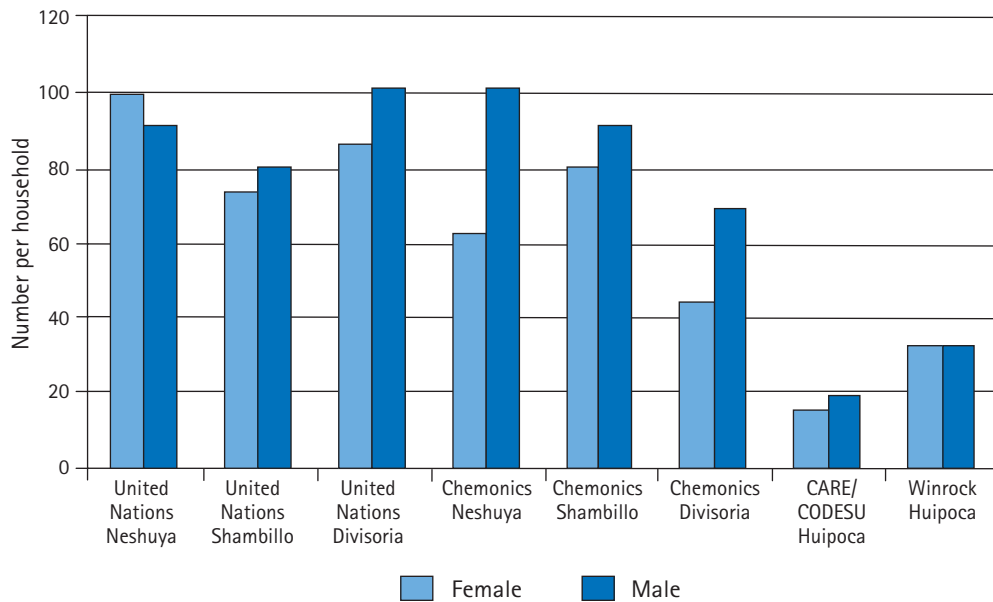


Source: Mae Fah Luang Foundation, 2004.

<sup>a</sup>1 rai = 1,600 square metres.

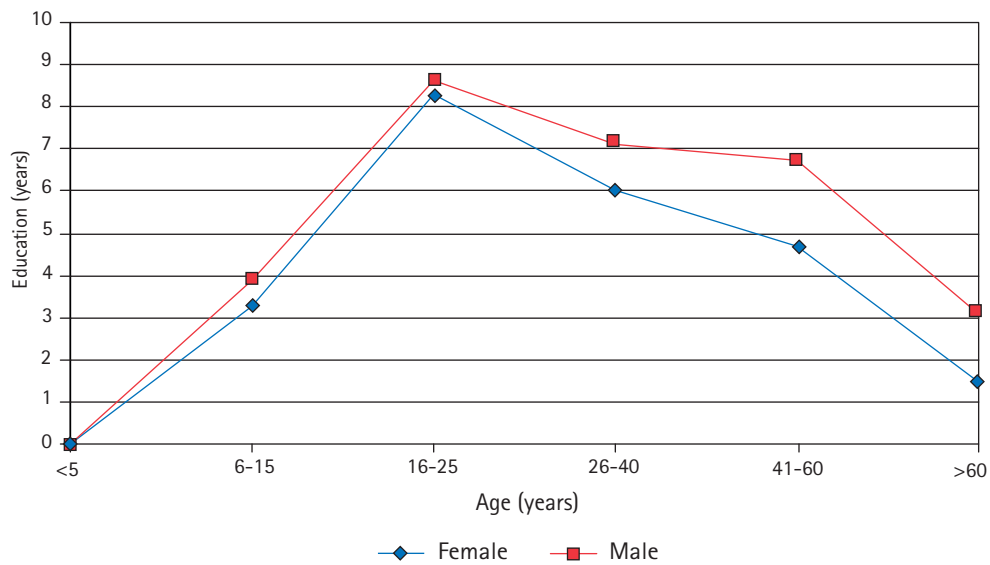
## Annex V. Peru field assessment: gender structure<sup>a</sup>

Figure I. Household gender structure



Source: Grupo de Análisis para el Desarrollo.

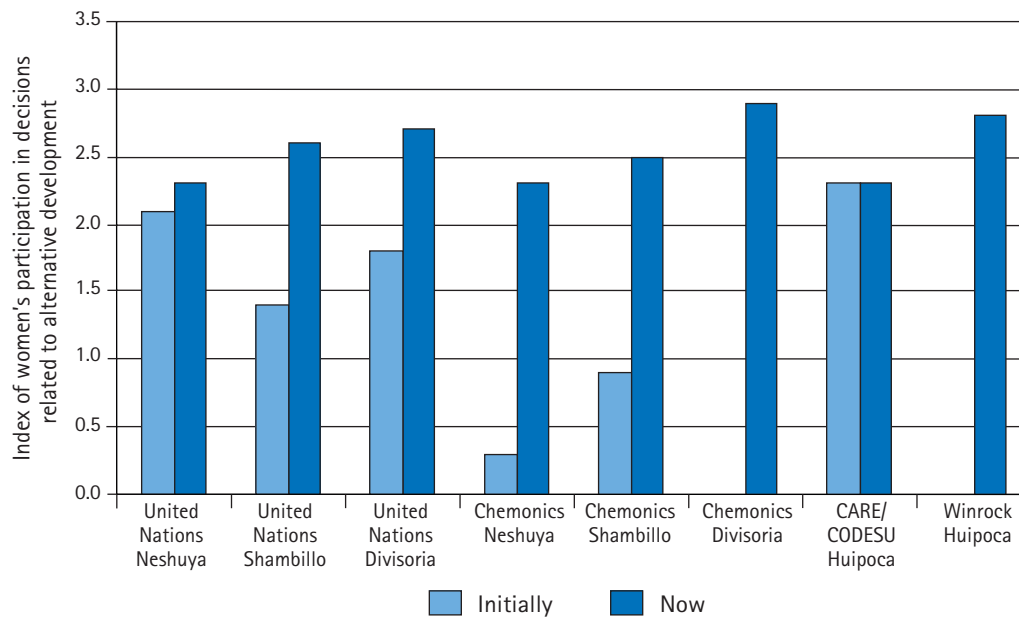
Figure II. Education, by gender



Source: Grupo de Análisis para el Desarrollo.

<sup>a</sup>Figures I-III depict four geographical areas—Neshuya, Shambillo, Divisoria, Huipoca—and five alternative development projects—two belonging to UNODC and three to USAID (as implemented by Chemonics, CARE International/Consortio para el Desarrollo Sostenible de Ucayali (CARE/CODESU) and Winrock).

Figure III. Women's level of participation in decisions



Source: Grupo de Análisis para el Desarrollo.

## Annex VI. Doi Tung development project: gender structure

Table 1. Education, by gender

Year	Male	Female	Total
1989	—	—	3 404
1990	—	—	3 638
1991	—	—	3 592
1992	2 401	2 135	4 536
1993	2 539	2 214	4 753
1994	2 644	2 346	4 990
1995	2 757	2 479	5 236
1996	2 825	2 575	5 400
1997	3 001	2 718	5 719
1998	3 121	2 859	5 980
1999	3 008	2 796	5 804
2000	3 070	2 845	5 915
2001	3 242	3 008	6 250
2002	3 292	3 067	6 359
2003	3 367	3 131	6 498

Source: Mae Fah Luang Foundation.

Table 2. Number employed by the project, by gender

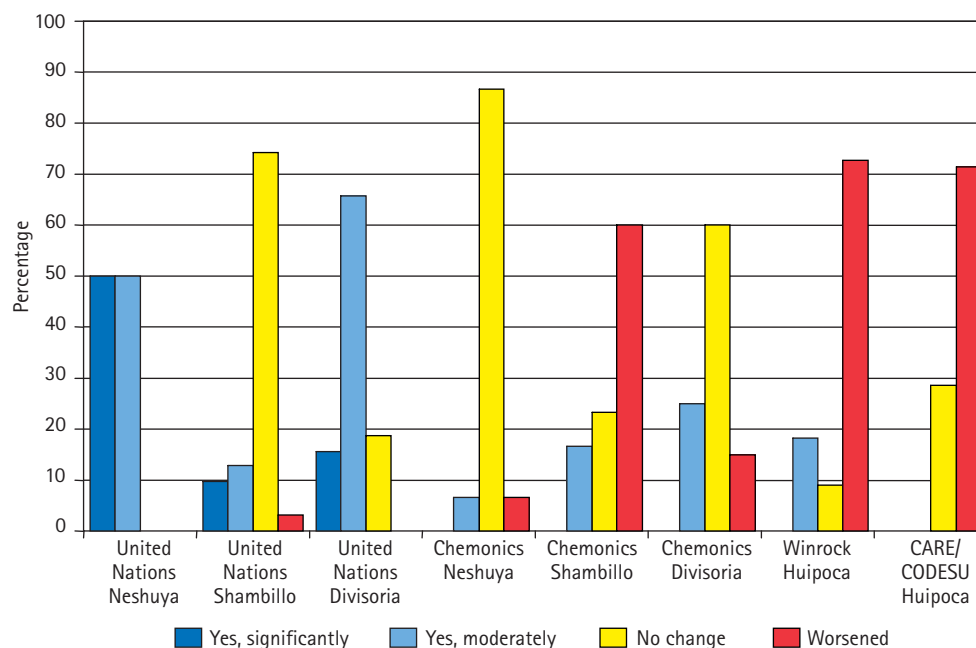
Employed				Unemployed									
				Year	Children			Old aged <sup>a</sup>			Unemployed		
Year	Male	Female	Total		Year	Male	Female	Total	Male	Female	Total		
1989			5 992	1989			3 404			806			—
1990			5 247	1990			3 638			984			652
1991			5 613	1991			3 698			453			573
1992	2 760	3 022	5 782	1992	1 941	1 896	3 837	191	274	465	153	99	252
1993	2 746	2 966	5 712	1993	1 885	1 878	3 763	196	278	474	129	110	239
1994	2 770	3 021	5 791	1994	1 906	1 905	3 811	226	320	546	95	54	149
1995	2 755	3 008	5 763	1995	1 850	1 891	3 741	250	350	600	85	46	131
1996	2 732	3 041	5 773	1996	1 826	1 859	3 685	253	344	597	89	51	140
1997	2 793	3 157	5 950	1997	1 933	1 973	3 906	279	388	667	114	46	160
1998	2 849	3 198	6 047	1998	1 870	1 963	3 833	283	420	703	156	62	218
1999	2 768	3 131	5 899	1999	1 778	1 851	3 629	256	383	639	140	70	210
2000	2 763	3 152	5 915	2000	1 739	1 777	3 516	244	394	638	189	101	290
2001	2 961	3 337	6 298	2001	1 689	1 742	3 431	285	448	733	170	77	247
2002	3 006	3 411	6 417	2002	1 691	1 767	3 458	243	403	646	170	85	255
2003	3 073	3 426	6 499	2003	1 601	1 694	3 295	247	427	674	146	102	248

Source: Mae Fah Luang Foundation.

<sup>a</sup>Persons of or over retirement age.

## Annex VII. Peru field assessment: impact and sustainability of alternative development

Figure I. Responses to the question, "Had alternative development improved your life standard?"



Source: Grupo de Análisis para el Desarrollo.

<sup>a</sup>Total or partial agreement was assigned a value of 1, other responses a value of 0.

Table 1. Opinions about improvements or detriments arising from alternative development (Percentage)<sup>a</sup>

	United Nations			Chemonics			Winrock Huipoca	CARE/CODESU Huipoca	Total
	Neshuya	Shambillo	Divisoria	Neshuya	Shambillo	Divisoria			
<b>Improvements</b>									
Access to credit	97	35	53	3	17	15	18	14	36
Market and prices	93	29	59	3	3	10	18	14	35
Increase in agricultural areas	97	55	88	23	40	30	18	29	54
Acquisition of equipment	60	35	50	20	20	20	18	29	34
Acquisition of goods	63	23	16	7	3	—	—	—	18
Access to educational services	77	26	59	10	20	20	9	0	34
Access to health services	77	26	56	7	20	15	18	14	33
Security and social peace	100	84	100	83	90	75	82	71	88
Home improvements	87	29	78	10	23	10	9	0	38
<b>Detriments</b>									
Loss of source of income	13	77	31	37	97	70	100	71	57
Sale of durable household goods	7	58	31	50	90	55	73	43	49
Need to return to coca bush cultivation	3	48	13	20	77	55	100	71	40
Problems in sending children to school	30	55	53	47	60	50	73	—	51

Source: Grupo de Análisis para el Desarrollo.

<sup>a</sup>Total or partial agreement was assigned a value of 1, other responses a value of 0.

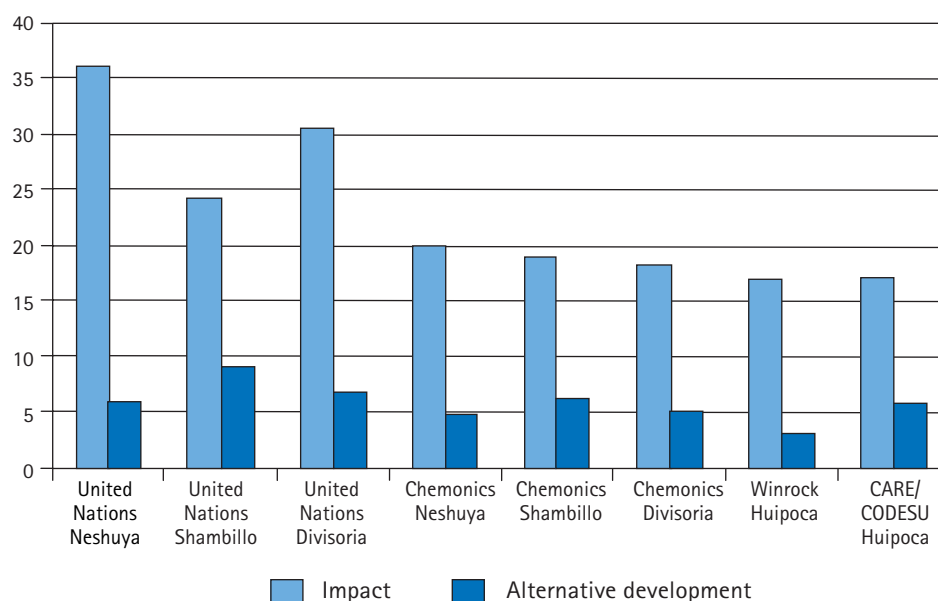
Table 2. Improvements after alternative development projects  
(Percentage)<sup>a</sup>

	United Nations			Chemonics			Winrock Huipoca	CARE/ CODESU Huipoca	Total
	Neshuya	Shambillo	Divisoria	Neshuya	Shambillo	Divisoria			
Access to credit	83	42	41	3	13	10	9	14	31
Market and prices	80	29	47	-	10	5	9	14	28
Increase in agricultural area	90	45	72	13	27	15	9	14	42
Acquisition of equipment	63	39	28	7	13	5	9	14	26
Acquisition of goods	50	26	3	3	3	—	—	—	14
Access to educational services	80	32	50	7	10	5	9	—	30
Access to health services	80	32	44	3	7	15	18	14	30
Security and social peace	93	71	91	47	47	4	55	71	66
Home improvement	83	35	69	10	10	10	9	—	35

Source: Grupo de Análisis para el Desarrollo.

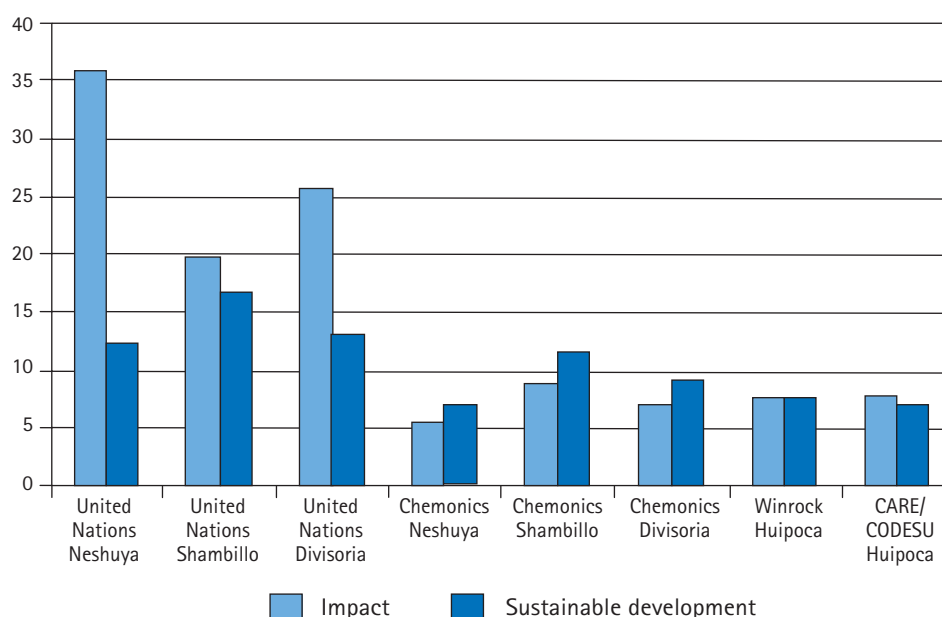
<sup>a</sup>Total or partial agreement was assigned a value of 1, other responses a value of 0.

Figure II. Impact index for the alternative development project<sup>a</sup>



Source: Grupo de Análisis para el Desarrollo.

<sup>a</sup>The impact index assigns points to opinions on specific positive impacts: "3" corresponds to "total agreement", "2" to "partial agreement", "1" to "partial disagreement" and "0" to "total disagreement".

Figure III. Sustainability index for the alternative development project<sup>a</sup>

Source: Grupo de Análisis para el Desarrollo.

<sup>a</sup>The sustainability index assigns a "2" if the impact is deemed sustainable, a "1" if doubts are raised, and a "0" if deemed unsustainable, or if there was no positive impact. The graphs show the mean value and standard deviation for each group.

Table 3. Changes in main economic activities after alternative projects<sup>a</sup>  
(Percentage)

Currently	Before alternative development projects					Total
	Coca bush cultivation	Agriculture	Extractives	Services	Other <sup>b</sup>	
Coca	8	2	—	—	4	5
Agriculture	43	93	80	33	40	65
Extractives	5	—	20	—	8	4
Services	7	2	—	67	—	5
Other <sup>b</sup>	37	2	—	—	48	22
<b>Total number of households</b>	<b>76</b>	<b>82</b>	<b>5</b>	<b>3</b>	<b>25</b>	<b>191</b>

Source: Grupo de Análisis para el Desarrollo.

<sup>a</sup>This table is a "transition matrix", which records responses concerning changes in main economic activities as a result of alternative development. The total shows main activities (by number of households) before the presence of alternative development projects, the last column (by percentage) main activities afterward. Shaded figures show the percentage of households whose main economic activity remained the same, whereas the other cells show the distribution of activities of households that changed (percentages in the columns add up to 100).

<sup>b</sup>Includes wage labour in diverse activities.

## Annex VIII. Peru field assessment: factors contributing to positive results in alternative development

Table 1. Most important factor in achieving positive results in an alternative development project

	United Nations			Chemonics			Winrock Huipoca	CARE/ CODESU Huipoca	Total
	Neshuya	Shambillo	Divisoria	Neshuya	Shambillo	Divisoria			
Permanent technical assistance	60	48	59	10	10	10	9	—	32
Beneficiary confidence in the alternative development project	17	13	13	7	3	15	—	—	10
Permanent beneficiary–alternative development project contact	10	19	9	13	—	5	—	—	9
Fulfilment of promises	13	6	9	—	—	15	—	—	6
No positive experiences	—	13	9	70	80	55	82	100	41
Other	—	—	—	—	7	—	9	—	2
<b>Total</b>	<b>30</b>	<b>31</b>	<b>32</b>	<b>30</b>	<b>30</b>	<b>20</b>	<b>11</b>	<b>7</b>	<b>191</b>

Source: Grupo de Análisis para el Desarrollo.

<sup>a</sup>CARE International/Consortio para el Desarrollo Sostenible de Ucayali ((CARE/CODESU) and Winrock).

Table 2. Most important factor in not achieving positive results in an alternative development project

	United Nations			Chemonics			Winrock Huipoca	CARE/ CODESU Huipoca	Total
	Neshuya	Shambillo	Divisoria	Neshuya	Shambillo	Divisoria			
Failure to fulfil promises	10	19	13	73	90	60	64	86	46
Lack of transparency in the use of resources	17	29	13	10	3	20	9	—	14
Little presence of alternative development technical personnel	—	—	19	3	3	—	9	—	5
Failure to inform beneficiaries adequately	13	10	13	7	3	15	—	—	9
Lack of confidence in alternative development project implementers	7	3	3	—	—	—	—	—	2
Lack of feasibility studies	—	3	9	—	—	—	—	—	2
Other	53	26	31	7	—	5	18	14	21
No response	—	10	—	—	—	—	—	—	1
<b>Total</b>	<b>30</b>	<b>31</b>	<b>32</b>	<b>30</b>	<b>30</b>	<b>20</b>	<b>11</b>	<b>7</b>	<b>191</b>

Source: Grupo de Análisis para el Desarrollo.

<sup>a</sup>CARE International/Consortio para el Desarrollo Sostenible de Ucayali ((CARE/CODESU) and Winrock).

Table 3. Level of confidence in the entity implementing the alternative development project  
(Percentage)

	<i>None</i>	<i>Low</i>	<i>Average</i>	<i>High</i>	<i>Very high</i>	<b><i>Total</i></b>
United Nations—Neshuya	—	—	10	67	23	30
United Nations—Shambillo	—	—	16	55	29	31
United Nations—Divisoria	—	6	25	38	31	32
Chemonics—Neshuya	23	37	30	7	3	30
Chemonics—Shambillo	17	57	20	7	—	30
Chemonics—Divisoria	—	35	40	10	15	20
Winrock Huipoca	45	45	9	—	—	11
CARE/CODESU Huipoca	71	29	—	—	—	7
<b>Total</b>	<b>12</b>	<b>23</b>	<b>21</b>	<b>29</b>	<b>16</b>	<b>191</b>

Source: Grupo de Análisis para el Desarrollo.



**كيفية الحصول على منشورات الأمم المتحدة**  
يمكن الحصول على منشورات الأمم المتحدة من المكتبات ودور التوزيع في جميع أنحاء العالم. استعلم عنها من المكتبة التي تتعامل معها أو اكتب إلى: الأمم المتحدة، قسم البيع في نيويورك أو في جنيف.

如何购取联合国出版物

联合国出版物在全世界各地的书店和经营处均有发售。 请向书店询问或写信到纽约或日内瓦的联合国销售组。

#### **HOW TO OBTAIN UNITED NATIONS PUBLICATIONS**

United Nations publications may be obtained from bookstores and distributors throughout the world. Consult your bookstore or write to: United Nations, Sales Section, New York or Geneva.

#### **COMMENT SE PROCURER LES PUBLICATIONS DES NATIONS UNIES**

Les publications des Nations Unies sont en vente dans les librairies et les agences dépositaires du monde entier. Informez-vous auprès de votre libraire ou adressez-vous à: Nations Unies, Section des ventes, New York ou Genève.

#### **КАК ПОЛУЧИТЬ ИЗДАНИЯ ОРГАНИЗАЦИИ ОБЪЕДИНЕННЫХ НАЦИЙ**

Издания Организации Объединенных Наций можно купить в книжных магазинах и агентствах во всех районах мира. Наводите справки об изданиях в вашем книжном магазине или пишите по адресу: Организация Объединенных Наций, Секция по продаже изданий, Нью-Йорк или Женева.

#### **CÓMO CONSEGUIR PUBLICACIONES DE LAS NACIONES UNIDAS**

Las publicaciones de las Naciones Unidas están en venta en librerías y casas distribuidoras en todas partes del mundo. Consulte a su librero o diríjase a: Naciones Unidas, Sección de Ventas, Nueva York o Ginebra.



Printed in Austria  
V.05-82516—October 2005—710  
United Nations publication  
Sales No. E.05.XI.13  
ISBN 92-1-148205-4



9 789211 482058



UNITED NATIONS  
*Office on Drugs and Crime*

Vienna International Centre, PO Box 500, 1400 Vienna, Austria  
Tel: (+43-1) 26060-0, Fax: (+43-1) 26060-5866, [www.unodc.org](http://www.unodc.org)

